

Domesticating Wildness

*The Role of Map Technology and Adventurous Winter Sport
in the Interaction with Wild Nature*

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Introduction

Our approach to wild nature is determined by the technology we implement to facilitate our perception of and interaction with it. When these technologies change, so does our relation to nature in general and wild nature in particular. Map technology determines the way in which we perceive our surroundings, and subsequently our relation to nature, while equipment technology gives the premises for our direct interaction with it. Consequently, the development of new map technologies that facilitate navigation, and equipment that assists physical movement in the wild will alter the way we associate with it.

We now measure the world with the help of digital sensors of various kinds. We cruise over nature, armed with instruments that photograph or scan the landscape. The measurements are in turn presented to potential users by means of sophisticated hardware and software, in ways that allow for the direct interaction with the information. As a result we can now cruise through nature, armed with technological extensions of our bodies and actions and – to an increasing extent – of our minds and analytical processes. New equipment technology has altered the conditions of non-motorised movement, and new navigational technology has to a certain extent replaced the need for navigational skills.

Both map and equipment technology facilitates movement, and to move down the face of a snow-covered mountain is among the more difficult ways in which to move in nature. When technological developments have rendered this less so, it leads to the increased appeal of this form of movement. The result is the rise of an adventure sport that used to be reserved for a selected few with the courage to face the risk and the challenge, but which now presents a more generally tolerable level of both. Freeriding – the negotiation of non-prepared mountainous landscape on alpine skis or snowboards – is becoming a more common way to interact with nature, entailing a change in the way we approach this landscape. And, as “it is commonly held that ideas and practices mutually

influence each other” (Riese and Vorkinn 2002:200), there is reason to believe that this alteration in approach will affect our idea of that landscape.

New ways of moving in unpredictable parts of nature are expressions of changing preferences with regard to leisure activities. New technologies that change our perspective on the landscape are expressions of the human tendency towards the facilitation of approach to, and management of, that landscape. But in my perspective this facilitation does not necessarily improve our ways of interacting with nature. I will argue that the developments following the implementation of certain kinds of technology may be detrimental to the interplay between landscape and freerider. I believe we may actually lose skills when we substitute them with technological aids, and hinder our progress as individuals.

The philosopher David Rothenberg presents perspectives conducive to the understanding of the relationship between technology, practice and the human idea of nature in his work *Hand's End – Technology and the Limits of Nature*. “Human nature, as well as external, encompassing nature are both swayed by changes in technology” (Rothenberg 1993:110). What we invent affects what we are and what surrounds us, while determining the way we relate to those surroundings. In the encounter between freeriders and the mountainous landscape these inventions set the parameters for the interaction between rider and nature, and awareness of their power over this relationship is beneficial to an understanding of how our actions affect our nature and that which surrounds us.

In an attempt to understand the effect our actions have on the natural world, it is important to understand how our ideas of that world are formed. And as technology is our way “to shape our relations to the world that surrounds us” (Ibid:xii), a study of the effects of technological innovation on how we interact with wild nature is likely to improve our perspective on how we come to see the world as we do. Technological innovation, and in particular computer technology, is commonly seen as producing positive change to the way we relate to the world and manage the parts of it that is in our interest. The communications theorist Neil Postman, author of the work *Technopoly*, suggests

that computer technology has a tendency to “make people believe that technological innovation is synonymous with human progress” (Postman 1993:117). I suggest that in matters of direct interaction with natural landscape, technological innovation may cause a deterioration of our experience of that landscape and of our actual ability to interact with it. I therefore propose that

Increasingly facilitated access to the wild, in the form of map and navigation technologies and changing methods of interaction with landscape, contributes to an approach to nature as a commodity, and a perception of it as a stage on which to perform.

Background

Our relation to the landscape will vary according to our approach to it, and our current approach has spawned a relation characterised by ownership and appropriation. “Do we not own nature, and make it appear how ever we want?” (Rothenberg 2002:18). We change and adapt environments to suit our needs and wants, with technology as primary associate in our interaction with nature. This is not only a physical adaptation of the natural landscape, but also a change in perception of it that facilitates the desired exploit. Map technologies play a central role in this interplay between human desires and the natural landscape. They lay the foundations for our perception of that landscape, thereby determining our approach to it. Professor of international studies and geography John Pickles has suggested that “maps provide the very conditions of possibility for the worlds we inhabit and the subjects we become” (Pickles 2004:5). Considering this it seems likely that changes in the relation between humans and the landscape as a result of technological innovation will result in changes in our perception of that landscape and of our position in it.

Map Technologies

The increasingly sophisticated measurements of the world, made with the increasingly sophisticated technological tools for describing that world, are turned into maps and images which are presented to us in increasingly

imaginative ways. Geographical Information Systems (GIS) and Web Map Services (WMS) are tools developed for the facilitation of management and surveillance of the earth, rendering our technologically generated perspective easier to view and manipulate. But, however sophisticated these technologies are at present, they are still expressions of our perceptions of the world, perceptions that are in part created through the implementation of the same technology. “These systems (GIS) do not mirror the real world but, just like maps, they create simplified and idealized images of it” (Dorling and Fairbairn 1997:130). And so the relationship between our maps of the world and our perceptions of that world is one of mutual reflexivity, and neither can be said to be wholly accurate representations.

We now also have the opportunity to do our own measurements. Using satellites and computer software we can quantify our own experiences in wild nature; with the help of the Global Positioning System (GPS) we can actually make maps of our own movements. Improved map technologies facilitate movement, and by using these technologies in our direct interaction with the landscape we change the conditions of this interaction. With the help of new, sophisticated and easily accessible navigational technologies, the barrier for embarking on journeys into the uncultivated natural landscape – what is often referred to as wilderness – is lowered. Our perception of the wildness of this landscape is subsequently diminished as a result of familiarisation with the help of a technologically constructed simplification of reality. This construct is not merely the product of technology, as technology is strictly a product of us, but of the cultural conditions under which it was created. “In attempting to define our place in the world of nature, we deal not with nature on the one hand and culture on the other but rather with many and various cultural constructions of the natural world” (Turnbull 1989:v). A map is a culturalisation of the natural, but our perception of the natural is culturally determined. And when that culture relies on a technological approach to nature, our perception of the natural becomes technologically determined.

Interaction with Wild Nature

The way in which the majority of the contemporary Norwegian population come into situations of direct interaction with wild nature is through outdoor recreational activities. According to a study by Alf Odden, 95% of the Norwegian population stated in 2004 that they had participated in some kind of outdoor recreation during the course of one year (Odden 2008). In other words *Friluftslivtradisjonen* – the tradition of outdoor life, of seeking wild nature for reasons of personal fulfilment – stands strong. In my opinion the difference between outdoor life and outdoor recreation lies in the motives for seeking nature, and the former emphasises existence in nature while the latter emphasises actions. In Norwegian the term *friluftsliv* is most commonly used to describe both; a ski-trip is considered a form of *friluftsliv* even if the goal is to reach a summit (Odden and Bischoff 2002, Odden 2008). I have chosen to describe it as the tradition of outdoor *recreation*, and differentiate by discussing motivational factors. And, according to recent studies, the traditions of outdoor recreation are changing (Vorkinn et.al 2000, Riese and Vorkinn 2002, Odden and Bischoff 2002, Odden in Kristensen 2002, Odden 2008). Traditional activities are losing ground to more modern forms, resulting in a changing appropriation of landscape and raising questions about the impact of these activities on the environment in which they are practiced, and on our way of relating to that environment.

The new forms of outdoor recreation include activities such as kiting, mountainbiking and freeriding (Odden 2008). These activities are dependent on the existence of certain environments for their practice, and alterations in the access to them influence both the activities and the environments. The causes of these alterations are often connected to various kinds of technological developments, rendering the relationship between outdoor recreational activity, technological development and environmental changes one of interest and importance in the continuous attempts to understand our impact on the environments in which we live and linger. The people who practice these activities seek different things than those who are content with a wander in the woods. The activities include higher risk, more speed and a different kind of

challenge. But according to Odden, “what lie beneath, also amongst the young, is the nature experience and the joy of doing something physical” (Odden in Storli 2009:55). At the same time he states: “There are actually more young people who now use nature as arena for their activities than before” (Ibid.). And this raises the question of what kind of nature experience we are left with, if what we perceive nature to be is an arena.

This view of nature as arena is strengthened by an increased focus on the quantification of experiences. GPS-based technologies that measure time and speed in addition to recording the trip in the form of waypoints and tracks, are becoming more common as they become more affordable and easier to use. And in combination with online tools or purchased software it is possible to publish these data on various websites. This promotes the comparison and distribution of experiences, and is a practice that carries diverse consequences. It can lead to increased focus on the quantifiable elements of experiences in nature, a shift that may result in the alteration of perspective on both nature and the experience. It may also cause less experienced people to use the published experiences of others as guides to their own, and set out on journeys lacking essential skill and knowledge.

Freeriding is that of the new forms of outdoor recreational activity which is most dependent on particular conditions for its practice. It is a form of downhill skiing which is characterised by its practice in non-prepared terrain. The ideal image of the sport is of pristine, untouched snowfields where the only sign of human influence is the track made by the rider as her or she turns their way down a mountain face in a spray of powder snow. This image is promoted by commercial media, and pursued by the participants, making the hunt for untouched terrain a paramount aspect of its practice. In the works I have studied in connection with this thesis I have encountered different delimitations of the sport, as the various authors tend to choose that which is most conducive to their approach. Telseth, who completed his master thesis in sports/outdoor recreation at Telemark College University (Høgskolen i Telemark) in 2005, has chosen to

include both free riding and jibbing – the variation focused on jumps and the performance of tricks in prepared terrain parks or in the natural terrain – in connection with ski resorts and in wild nature, in his approach. This definition is best suited to his purpose as his concern is with the dimensions of meaning that characterise the activity and the culture (Telseth 2005). Berntsen, who completed her master thesis in sports sociology at Norwegian School of Sport Sciences (Norges Idrettshøgskole) in 2008, has chosen to delimit the freeride phenomenon quite narrowly; excluding snowboarding, telemark skiing, jibbing in general and freeriding conducted independently of the ski-resort (Berntsen 2008). Her claim is that the people who conduct lift-based freeriding differ too much from those who choose to hike to the top. In the context of this thesis these differences are less relevant, as my concern is with freeriding as a way of interacting with landscape, and not only the social characteristics of a group. Berntsen's findings are still relevant to this thesis, as her differentiation between the variations of the sport does not affect the context at hand. The doctoral dissertation of Odden, completed at the institute of geography at the Norwegian University of Science and Technology (Norges Teknisk-Naturvitenskapelige Universitet) in 2008, focuses on the trends and changes in outdoor recreational activities in general, and his definition is therefore the broadest. He includes all forms of skiing and snowboarding outside of prepared slopes, both lift-based and not (Odden 2008). In this context it is most relevant to adopt Odden's definition, as I am handling freeriding as a way of interacting with uncultivated landscape in which technology is a defining aspect.

Technological developments have contributed greatly to the increased popularity of freeriding in Norway. Better ski- and snowboard-equipment compensates for lack of experience and enable people without much specialised training to venture into more demanding and untracked terrain. According to Odden's findings, 50% of youth who participated in alpine skiing activities did leave the prepared slopes in 2004 (Odden 2008). When venturing away from the immediate vicinity of ski-lifts it soon becomes necessary to navigate and orientate oneself in the landscape in order to pick the right way down. Failure to

do this can lead to that famous point of no return and unwanted consequences. This is especially important when practicing freeriding independently of resorts and ski-lifts, and is something that may work as a deterrent on people who lack experience within this form of movement in the wild. Technological facilitation of navigation and of physical interaction with landscape is changing the prerequisites for movement in wild nature, and with this change follows the potential for an alteration in both perception and approach.

My reason for choosing to focus on freeriding as an example of the changing methods of interacting with wild nature lies within the sport's dependency on technology for its practice. It is also a result of the fact that the sport is for the most part dependent on the existence of wild nature. The combination of these dependencies renders freeriding a good example of a complex interaction between nature, technology and human intention. I am myself a participant in the activity, and have observed the ways of the community actively for two seasons and in three countries. It is a sport that develops in time with technological developments and increasing flows of information; the progress of the sport is to some extent dependent on technological progress. But this same progress is what tends to impact on wild nature, either physically or through alteration of our perceptions of it. The question remains whether the resulting changes in the way the participants approach the wilderness represents a shift in perspective that is beneficial or detrimental to our relation to the natural world.

Structure

This thesis consists of five chapters, each handling a different aspect of the issue at hand. The first chapter is dedicated to an examination of the map technology that currently determines our perspective on the natural landscape. It briefly outlines the role of these technologies in the freeride context and goes on to describe how they function, with the aim of demonstrating what kind of perspective they yield. The second chapter is a discussion of the nature of the

information resulting from the described methods of surveying the world. It then moves onto the role of facilitation; the form resulting from the development of sophisticated map technologies and the form resulting from the development of physical extensions of our abilities. The following chapter is dedicated to the sport of freeriding, the encompassing industry and the social and cultural aspects of it. It also handles the effect of commercialisation, on the sport and on the perception of the environment in which it is practiced. The fourth chapter examines the matter of wilderness and wildness, and examines the role of increased access in our relation to both. It then goes on to discuss how the appeal of the pristine affects the remnants of wild nature. The last chapter focuses on the motivations behind seeking wild nature and wild experiences. I here examine the lure of adventure and the power of the unknown, alongside factors like risk and play. Following this is a short summary of my findings, a section in which I represent the most central aspects of my work before moving on to the final conclusion.

1. Measuring the World

Cartography is a way of describing the world through measurement, and however the techniques of measurement and the methods of presentation change, the general purpose is still to describe the world accurately. But, however accurate, these descriptions are still human interpretations of a natural world that we are unable to conceive of in its entirety. Nature, as apart from humans, is by some considered a social construct (Evernden 1992, Skogen 1999). But as Ketil Skogen, professor II of the Norwegian institute of nature research (NINA), suggests: “Although nature is socially constructed, there is a physical world around us which we must interact with and relate to” (Skogen 1999:28). And a part of our relation to that physical world is shaped by the technologies we implement to measure it, interpret the measurements, present them and help us navigate. This technology shapes our perspective on a world in which possibilities are shaped by maps. But we shape the maps, and we are therefore the creators of possibilities. Consider again the quote from the introduction in which John Pickles suggests that “maps provide the very conditions of possibility for the worlds we inhabit and the subjects we become” (Pickles 2004:5). Developments within map technology have the potential to greatly affect us, our perceptions, the world and the wild. They also affect our experiences in nature. When these experiences are quantified through the use of GPS receivers and software that measure and calculate every aspect of every journey, it has the potential to influence our approach to the experiences and to nature. Neil Postman writes in his work *Technopoly* that “technologies create the ways in which people perceive reality” (Postman 1993:21), and technology promoting the quantification of reality is no exception.

As a result of our interaction with our surroundings we form cognitive maps – or mental maps, as they are more commonly referred to. These are the cognitive versions of the geographical records of our experiences, which aids in our judgement and perception of surroundings. The processes involved are not thoroughly known, but what is known is that cognitive maps are created by each

individual and that they vary widely according to sex, place of origin, experiences and other, related aspects (Schneider 2007:81). These maps play a role in the physical process of mapping, as they influence how the person conducting the process perceives the place in question and subsequently how he or she will interpret the data accumulated through the measurement processes. If we consider how these constructed, external maps again affect the formation of mental maps in the mind of the map-user – due to their power to influence our understanding of spatial relations – it becomes clear that the power of the map goes far beyond the mere aspect of spatial navigation (Ibid:81). If we also take into account that extensive use of navigational aids like GPS receivers may have as a result that the study of both terrain and maps is perceived as superfluous, it becomes increasingly important to examine the role of such technologies in our interaction with nature.

In this chapter I will outline the tendency towards the quantification of experience. I will then give an account of the current methods of measurement, processing and presentation of cartographic material. I will also handle the navigational technologies most commonly used in freeriding and embark on a discussion of the influence of these technologies, and the way they are used, on our approach to nature.

Leaving Your Mark Online

We measure the world so as to describe it accurately. Through the collection of data we are able to create simplified depictions and models of reality and thus make the world easier to understand. The work of philosopher Albert Borgmann, *Holding On to Reality - the Nature of Information at the Turn of the Century*, provides relevant insights into the role of maps and technological information: “Maps are the instruments that render reality not just perspicuous but surveyable from end to end” (Borgmann 1999:168). And through the implementation of certain technologies, our experiences in wild nature can become quantifiable as well. We may collect accurate data about where we have

been, and we may analyse our experiences, using automatically recorded measurements of our efforts to compare them with our own or those of others. What we do in life and how we move in nature is not just a matter of making the most of opportunities and increasing the quality of life, but a measure of our position in the world. A tendency towards the quantification of experiences in nature and the subsequent publication of them through websites designated to this practice can be seen in connection with the increasing number of ways for people to promote themselves and their experiences online. User-defined outlets like MySpace, Facebook, Twitter and Youtube are amongst the more commonly known.

As you walk along, the GPS receiver collects and stores the points you pass through, creating a track that can later be combined with aerial photographs, satellite images or maps to create a geographically accurate record of your trip (Owings 2005). It also records data about distance, time, speed and elevation difference. It can ensure that you never walk the same path twice, or that you never stray from what is known, and reveal all the measurable details of your journeys. Whatever the motives behind the registration of one's own movements in nature are, the results are the same; an experience is measured and analysed, thereby making it easily comparable with those of others. It is currently possible to make these records available online through various websites. A site like Google Earth allows you to mark places and create paths and subsequently share them with other users. It is also possible to upload pictures and add directions and descriptions, thereby allowing you access to individual experiences and information of a different nature than that generated by the tourism industry or local government. Freeriders can share their experiences online, making them available to whoever would want to follow in their tracks. At the same time they are showing whoever is interested a little bit of themselves, leaving accounts of their experiences behind and making parts of their lives searchable via the internet. The effect of this is a significant increase in the distribution of information, which in turn affects the sport and the approach to and use of the environment in which it is performed.

This tendency to exhibit experience meets with different reactions amongst freeriders, and my two interviewees represent opposing views. Eriksen is concerned with the crowding of places he used to have to himself, and does not agree with the publication of directions and descriptions (Eriksen: interview 9.2.2009). Fadnes, on the other hand, uses these resources in order to pick destinations and search for new opportunities. But he is also aware that people who use these tools can end up embarking on journeys they do not have the experience or knowledge to complete.

“When I’m in the mountains close to where I’m from I meet more and more groups of people who have never been to the area before and who are on their way up a mountain. They’ll stop me and ask where the mountain is, having found some description of the trip on the internet. But in reality they are completely inexperienced and have no idea where they are going. They haven’t talked to any locals, because they have found all the information they think they need on a website from their office in Oslo. So they circumvent the local knowledge and the insight present in the community and just wander off” (Fadnes: interview 18.12.2008)

Lacking insight and experience, but carrying information provided by technology and armed with the pocket-sized providers of more, one may wander into the wild nature a snow-covered mountain represents, believing to be in possession of knowledge. The reality of the situation is overshadowed by the information one has access to. “Information is about to overflow and suffocate reality” (Borgmann 1999:213). We risk losing perspective on what we need to know in order to interact with the natural, uncultivated world. In part because “we gauge how much we know by how much we know how to look up, not how much we can recite or retain” (Ibid:21).

Methods of measurement, map technologies and navigational aids are becoming increasingly sophisticated, available, affordable and user-friendly. And people are starting to see the potential applications of this technology in their

daily lives. Geographical Information Systems (GIS) are implemented in management processes on most levels. An array of internet-based map services, or Web Map Services (WMS), is available to the public. Maps and geographic images are available in various forms on websites such as Google Earth, Finn 3D-kart, Gule Sider and Norgesglasset. In addition there is an increasing amount of websites dedicated to the dissemination of information about trips and activities undertaken in wild nature. Some examples are the Norwegian sites God Tur, and Ski og Sykkel, while international examples are Gpsies, and Run.GPS.

Gathering Information

Since cartography to a great extent is about measuring land, it was up until recent times a quite difficult and time-consuming practice. The gathering of information required great resources, and when the measurements were made they were final, remaining unaltered until the endeavour was undertaken once more. “Information had to be wrested laboriously from heaven and earth, and once committed to paper and constituting a map, the information presented a rigid and limited aspect of reality” (Borgmann 1999:169). The products of these endeavours rarely had any great or direct influence on the perceptions of nature amongst the population. “Though traditional maps could encompass a region, the globe, and even the universe, they failed to penetrate and dominate reality” (Ibid.). The geographical perceptions of people were largely products of their own movements, results of their experiences of the landscape and environment in which they lived and worked. If one lives in an area and uses the landscape frequently one has no real need for maps. It was people living in other places that had a need for maps for navigational purposes, and these maps in turn functioned as a means of access to the places which to them were unknown. Facilitation of access to wilderness for recreational purposes through maps and navigational aids is founded on the same principles. It is also now those living in other places, far away from the wild both in distance and in mind, who are constructing and acquiring the new maps and map technologies. They are doing this in order to

describe and understand a world largely unknown to them, and through these depictions they are satisfying their curiosity and facilitating their own access to what is to them largely unknown.

The rigid methods of measurement and presentation of spatial information are things of the past. Now our unknowns are measured and processed using highly sophisticated technologies undergoing continuous development. Although aerial photography has been practiced for some time now – the first aerial photograph was taken in 1908 (Rød 2009:11) – the equipment standards, methods of processing and relative level of expenditure have changed greatly in the past few decades (Moderne Datafangstmetoder: Gardermoen 10.11.08). In addition to the improvement of techniques, and the rise of technological methods like satellite imagery, airborne laser scanning and infrared scanning, there have been developments like the afore mentioned Geographical Information Systems (GIS), Global Positioning System (GPS) and Web Map Services (WMS). They are all technologies facilitating the task of mapping, measuring and analysing the earth, and the presentation and communication of the resulting information. Without embarking on an extensive account of the history and practice of cartography, I will outline the essential tools and techniques most commonly used in current practice. Through an examination of these techniques one gains perspective on our current approach to the natural world, as it is the products of these processes that lay the foundation for our perception of it. Our mental maps are formed on the basis of these products, which are, however sophisticated, expressions of a view. “Every view is taken (...) from somewhere, every view is but one perspective on the common scene” (Wood 1992:28). It is imperative to gain an understanding of how this view is generated in order to understand the perspective it yields.

Aerial Photography and Remote Sensing

While attending seminars and conferences about mapping practices, techniques and tools, I gained an understanding of the various methods of

information gathering. Examples of aerial photography, orthophoto and its applications with GIS were displayed and the processes explained. Laser scanning and infrared imagery were also handled, and I was introduced to the uses and potential uses of these technologies. All these methods of mapping and measuring are generating vast amounts of information, and it is important to possess basic knowledge of how they work in order to comprehend the amount of detail and the kind of information that is available for analysis. The methods are also direct reflections of our current approach to nature – our tendency to divide, classify and categorise that which surrounds us – and we are brought closer to an understanding of what this entails through an examination of these methods.

Aerial Photography

During the seminar titled Modern Methods of Data Capture held at Gardermoen in November 2008, it was made clear that all contemporary data collection now is conducted with the help of digital sensors. There has been little change within cartographic principles and theories in the past thirty years, but vast such with regard to method and technology. Among other things the tools for aerial photography have been greatly improved, providing greater accuracy and level of detail, while laser scanning techniques have been developed to such an extent that it is now the dominating method by which to collect information about elevation and terrain.

The perhaps most common way to acquire the information necessary in order to construct a topographical map is through aerial photography. Small aeroplanes will fly over selected areas and photograph them with a digital camera¹, or sensor, especially adapted to the task. Prior to execution the assignment has to be thoroughly planned; the flight-path is determined in advance and the area to be photographed is divided into strips. The pictures are taken from such angles and at such intervals as to provide images with a certain amount of overlap. This ensures the coverage of the whole area, but it also

¹ Some still use an analogue camera, although it is not common in the Norwegian context.

enables a three-dimensional view of the landscape through the use of stereoscopy or stereo viewing. If one takes two photographs of the same terrain with more than 50% overlap from a slightly different point of view it is possible to see the terrain in 3D by juxtaposing the images and training the eye to perceive these two two-dimensional images as one three-dimensional one (Strande 1986:83 in Rød 2009:123, *Moderne Datafangstmetoder*: Gardermoen 10.11.08). This method is a step in the process of photogrammetry, which is the “science of making measurements from photographs” (Walford 2007).

After generating the photographic material it has to be processed in order to make it accurate and thereby useful in a cartographic context. According to the author of *Verktøy for å Beskrive Verden* (Tools for Describing the World), Jan Kjetil Rød, this processing gives the picture the same geometrical characteristics as a map, ensuring the correct scale throughout the image. The process involves digitalisation (in the few cases where the material is not obtained with digital equipment), correction and stitching together. The result is called an orthophoto and is used as the basis for topographical maps and in GIS. The processed images add detail and photo-realism to the abstract thematic layers of GIS and are used extensively by planning and management offices (Rød 2009:124-125).

Infrared Aerial Photography

Although this technology is of no current direct importance to freeriding, infrared aerial photography is an important method of measurement to consider with regard to how technologies change our perception of nature, as it yields vast amounts of unique information. It is a particularly good method of accumulating information about vegetation and water-content in the soil (Temadataforum: Oslo 6.10.08). Using this method we may in yet another way discover hidden aspects of nature. We can quantify potential and manage it more precisely as a result. Norway is currently being photographed with infrared technology on a circulatory basis. The project started in 2005 and the country will be covered in its entirety within a few years – when the process will start anew (Ibid.). The material is not currently being processed, but it is possible for those interested to

order processing of desired material. The infrared photographs are obtained through the same camera as regular aerial photographs, as the digital camera records images corresponding to black/white, colour and infrared film simultaneously (Ibid.).

Laser scanning

Laser scanning is also used extensively, and is now the most common method for the generation of data regarding the elevation differences of natural terrain. This is mainly due to it being less costly and faster than photogrammetry. The switch from analogue to digital cameras for aerial photography resulted in a narrower geometry of measurement and subsequently less accurate elevation data (Moderne Datafangstmetoder: Gardermoen 10.11.08). The improved quality of the images compensates for this, and with the increased use of laser scanning the geometrical limitations of the digital cameras are of no great significance. The practice of laser scanning is similar to that of aerial photography. An instrument containing a distance-measuring laser and a mirror is positioned on the underside of the body of the plane. It emits pulses that are reflected and aimed by the mirror and then records the pulses as they return to the instrument. It then generates information about the distance between the plane and the ground on the basis of the time it takes for the pulses to return. The positioning and orientation of the instrument is controlled with the help of Global Positioning Systems (GPS) and Inertial Navigation Systems (INS)². The result is a swarm or cloud of points that is processed in order to yield the desired information (Ibid.). The potential uses of this technology are vast and, as the accuracy is claimed to be more than sufficient, it is a great way to obtain information about the landscape. The challenges and limitations tied to this technology revolve around issues of accurate positioning and time-consuming checking and cross-referencing of data, in addition to difficulties related to measuring certain elements like snow, ice, water and sheer and overhung cliffs (Ibid.).

² INS is a system that uses motion sensors to calculate position without the need for external references. It is not used in the contexts with which I am concerned in this thesis and will therefore not be explained further. I will further elaborate on the nature and use of GPS later on.

Elaborate demonstrations of digital map technologies are quite impressive. During the seminar at Gardermoen the audience was treated to a glimpse of what it is possible to generate by combining laser scanning with orthophoto; a virtual world consisting of clouds of points. From afar it looks like a true three-dimensional image, but as the computer carries the viewer through the depicted landscape the trees dissolve into myriads of tiny coloured dots when one passes through their branches. In other words this technology enables us to present the world in point-form, reduced to a collection of dots representing the time it takes for a laser-pulse to pass from an aeroplane to the ground and back again.

Satellite Imagery

Sophisticated aerial photography and the ability to scan landscape with airborne laser have greatly improved our ability to wrest spatial information from nature. But the true change in perspective was nonetheless the rise of satellite technology. The ability to see everything from far away – to gain an overview of our planet – changed the ways of managing nature. The first satellite, bearing the name of Sputnik and a product of the USSR, was launched in 1957 (NASA 2007). It was the first artificial satellite to orbit the earth, and it was there on military business. But satellites were soon put into use for other purposes. Civilian satellites have been circling the earth since 1960 (Rød 2009:125). The first ones were sent up to monitor weather systems, but the technology is now being utilised for a wide selection of purposes. The mapping of resources, information gathering in the wake of natural disasters and navigation are some (Ibid.). There are two main kinds of satellite-orbits relevant in this context; the geostationary and the near-polar orbits. The geostationary satellite rotates at the same speed as the earth and thereby keeps the same position relative to the earth at all times (Ibid:126). Near-polar satellite-orbits run in a north-south orientation, almost on a right angle with the earth's direction of rotation (Ibid:127). These satellites can also be moved and directed at whatever is in need of surveillance. Up until the 1990's the best photographic resolution possible to get from a satellite like the SPOT-satellite, a French project launched in the late eighties, was 10x10 metres. This means that one picture-element represents an area on the ground that covers

10x10 metres (Ibid:129). The SPOT satellite can today produce images with a resolution down to two and a half metres, while there are others that manage a resolution of less than one metre (Ibid:130).

There are two kinds of satellite-sensors, active and passive. The passive kind does not emit its own signals but rather receives radiation in the form of reflected sunlight and radiation emitted by the earth. This radiation, mainly visible light or infrared radiation, then constitutes the basis for the production of images, but as it is dependent on the passive reception of radiation it is sensitive to disturbance caused by its reflection from particles in the atmosphere, clouds and fog (Ibid:130). These kinds of sensors can only produce images in clear weather. An active sensor emits its own radiation in the form of radar, and forms images on the basis of the reflection from objects of this radiation that returns to the satellite (Ibid:130).

These tools all yield information about the world, facilitating surveillance and management of the planet. They are based on principles of measurement and the products of these measurements come to constitute part of the basis on which we form our perspective on our surroundings. Although highly sophisticated, the images and measurements resulting from the implementation of these technologies yield a simplified perspective on the earth, a technologically generated perspective that is a product of our approach to reality. In order to make full use of them we also need other tools to aid us in their interpretation.

Tools of Navigation and Interpretation

All the information gathered through the application of the techniques presented above, all these descriptive measurements and images, are of little use to the wider public in their initial form. We need tools of interpretation in order to utilise it, tools that have in the past couple of decades reached a level of sophistication – and user friendliness – that have made them more affordable and available. These tools exert significant influence on management processes,

rendering the world more perspicuous. They also influence the lives of people with an interest in surveying the land through geographical images and maps. The availability of this information has the potential to alter the relationship between people and landscape, as it changes the conditions of their interaction. With the implementation of computerised processes of analysis, classification and navigation, the importance of possessing these skills is diminished. The situation is now that “in the realm of leisure and consumption, technology in the narrow engineering sense and technology in the broad cultural sense have converged to obviate powerful skills and habits of realizing information” (Borgmann 1999:183). And while the processes are simplified, our interaction with the landscape is simplified, potentially resulting in a loss of complexity and of individual ability.

GIS – Geographical Information Systems

“A geographic information system (GIS) integrates hardware, software, and data for capturing, managing, analyzing, and displaying all forms of geographically referenced information” (GIS 2009). It is a tool that combines processes and methods in order to facilitate work with spatial information. GIS maps are either vector or raster based. Vector based maps represent features with the help of lines and polygons or, more generally put, geometric elements (Open Geospatial Consortium 24.5.2007). Raster based maps are constructed as grids, where geographic features are represented within a “matrix of grid cells” (Ibid.). This is according to Borgmann the “archetypal instrument for the extraction of information from reality” (Borgmann 1999:74). The use of grids has significantly improved our ability to analyse reality: “Grids wrestled reliability from contingency and produced information that made reality not just perspicuous but surveyable” (Ibid:75). But a lack of standardised grids is complicating the process of GIS implementation (Temadataforum: Oslo 6.10.08). Various actors have various needs and tend to adopt the grid that is most conducive to their purpose, rendering collaboration and standardisation a significant hurdle (Ibid.).

According to Pickles, “GIS itself has a poorly developed archive and virtually no critical history of its own production” (1995:1). Ian L. McHarg, a Scottish-born landscape architect who pioneered the concept of ecological planning wrote the book *Design with Nature*, published in 1971. He displayed a method of layering information categories in maps, which works according to the same basic principles as GIS (McHarg 1971). He added and removed categories and displayed through this an early version of the now common way of dividing the world into layers containing features of the same kind. The developments of this technique of slicing the world into homogenous categories between the work of McHarg and its current universal application are obscure, and an important reason for this may be that the systems are used within a wide range of disciplines and that they are under constant development. In that respect they are of the same nature as the maps they handle: “Maps are not drawn once and for all but are constructed and reconstructed until they reveal all the relationships constituted by the interplay of the data” (Wood 1992: 185). And even though they are more complex than their forebears they still retain some of the limitations of these. All cartographic material are simplified versions of reality, they are human interpretations of the world. We are unable to decipher all aspects of a given landscape, let alone review it in full detail on paper or even on the screen. “This is as true for the more complex data models as for the simple ones, although the more complex digital representations tend to produce pictures that *appear* more real” (Dorling and Fairbairn 1997:130).

Geographical information systems have been developed and used within such a wide array of disciplines as agriculture, botany, zoology, business, computing, design, planning, engineering and geography (Pickles 1995, 20th Nordic GIS Conference: Fredrikstad 15-17.10.08). And they are subsequently defined slightly different within each of these disciplines. Common to these definitions is “some relational system of spatial information handling and representation” (Ibid:2). According to most people working with GIS, the benefits are seemingly endless. Processes are altered and simplified; analysis can be done with the push of a button. According to Pickles “GIS has emerged above

all as a tool and product that changes the way certain groups and organizations operate” (Ibid:3), a statement that hints at the monumental effect of the implementation of these systems within the various disciplines. If we see GIS as referring to “any kind of automated geographic data processing” (Ibid:2) it becomes clearer what kind of change Pickles is thinking about. The implementation of these systems then entails the actual automation of geographic data processing, a massive and fundamental change in operation for any affected field of knowledge.

But this automation facilitates change beyond the scope and spectre of the process itself. Pickles sees GIS as “a set of tools, technologies, approaches and ideas that are vitally embedded in broader transformations of science, society and culture” (Ibid:4), thereby supporting the notion that these systems represent much more than easily manipulated digitalised geographical information (20th Nordic GIS Conference: Fredrikstad 15-17.10.08). These ‘broader transformations’ are rarely addressed in direct connection with GIS, neither by users or would-be critics. The lack of attention towards these effects of GIS and their implementation is connected with the lack of critical history of the production of GIS. The rapid development, the broad application and the very nature of the information in question results in little critical scrutiny on any level. Geographical information in general and cartographic information in particular is fundamentally difficult to question for most people not trained in the relevant fields of knowledge. We are taught that maps are true representations of the landscape, that the information contained within them is the result of meticulous measurements done by accurate technology in combination with people competent in their field. Maps are presented as truth, and when we come to rely too heavily on these representations of reality as foundations for our perception of the world, this perception is determined by the increasingly sophisticated – and commercial – products contemporary cartographic products and navigational aids have become.

GPS – Global Positioning System

“The Global Positioning System (GPS) is a constellation of orbiting satellites operated by the U.S. Department of Defence to provide navigation, position, location, and precision timing services to users worldwide” (Pace et.al 1995: iii). In short this is a system of satellites in near-polar orbits launched by the USA during the eighties and nineties. The 24th satellite was launched in 1993, completing the network and providing US Defence and – a few years later – the world, with a quite accurate navigational aid. According to the non-profit think tank called the RAND Corporation “GPS navigation and position determination is based on measuring the distance from the user position to the precise locations of the GPS satellites as they orbit” (Ibid:237). The GPS works by measuring the distance to four satellites and thereby providing information about the user’s geographical position. The way in which the satellites are dispersed in their orbits ensures that any part of the globe is covered by at least four satellites at all times. The coordinates these measurements provide include latitude, longitude, altitude and GPS time (Ibid).

Until the turn of the millennium, access to full use of the system was restricted, and the US Department of Defence were the only ones benefitting from the full potential for accuracy. This was called Selective Availability and was terminated in 2000:

“Selective Availability (SA) was an intentional degradation of public GPS signals implemented for national security reasons. At the direction of the President, SA was discontinued in May 2000 to make GPS more responsive to civil and commercial users worldwide. The U.S. Government has no intent to use SA again” (Space-Based Positioning, Navigation and Timing 2009).

The system was suddenly fully available to the public. Selective Availability had limited the accuracy of the system to about 100 metres. With its termination the accuracy was down to 20 metres, rendering it much more useful for outdoor enthusiasts of all dispositions and all others concerned with their geographical position on the globe. Many were worried that the US Government would turn

the function back on, and used this as an argument against acquiring the technology. When, then US President, George W. Bush in 2007 agreed to the decision not to procure any more satellites with the ability to “intentionally degrade the accuracy of civil signals” (Space-Based Positioning, Navigation and Timing 2007), the fear of manipulated signals subsided and the GPS industry was allowed to take full flight.

And it has certainly taken off. In my own experience it has gone from a bulky apparatus of doubted functionality and accuracy to a sleek, easily operated tool that tells you accurately where you are, seemingly without fail. The prices have dropped significantly, and a test done by the Norwegian outdoor magazine UTE claims that you can get a “first-class GPS with a topographical map for less than 5000 kroner” (Bølstad 2009:66). You can also get mobile phones with a built-in GPS receiver, but these are generally not as sophisticated as the fully dedicated type.

DGPS – Differential Global Positioning System

In order to get the accuracy that renders GPS truly useful in a freeride context it needs to be combined with an assistant system. DGPS stands for Differential Global Positioning System and is a system that uses the GPS in connection with geostationary satellites and a network of ground stations in order to improve the accuracy of the GPS and the GLONASS (the Russian equivalent to the GPS, consisting of 13 operational satellites) (ESA 2007). At about the same time as ex-president George W. Bush declared the danger of a return of SA to be over, the European Space Agency (ESA) began launching their geostationary satellites. Geostationary satellites, as mentioned earlier, maintain a constant position relative to the earth, rotating at the same speed as the globe itself. These ESA satellites are part of EGNOS, the European DGPS (Ibid.). According to the ESA website, the system enhances the accuracy of the GPS to about two metres (Ibid.). ESA is also developing Galileo, Europe’s own full global satellite navigation system, which is to be inter-operable with GPS and GLONASS (Ibid.). Galileo is supposed to be fully operational by 2013, and will be under civilian control (Ibid.). Other satellite-based navigational systems have

been created by India and China, and other GPS assistant systems like EGNOS have been launched, but a thorough examination of them all is superfluous in this context.

Guides, Toys and Tools of Quantification

A GPS receiver is an excellent navigational aid. It shows your position on a digital version of a topographical map and has an array of functions which can aid the user in the planning, execution and analysis of any trip on which it is employed. Most GPS receivers allow you to make waypoints, routes and tracks, a personal map of your trip. The waypoints are the places you pass through, the route is where you want to go and the tracks are the records of where you have been. Through the generation of waypoints, routes and tracks the GPS is facilitating the planning, execution and analysis of any given outdoor adventure. It is a small electronic log book that records all the measurable aspects of your trip, all the while able to pinpoint your current position in an instant. It quantifies your experience, and ensures that you don't get lost on the way. There are now numerous GPS receivers on the market, vast amounts of software to be bought or downloaded and a large selection of instructional books attempting to present it all in understandable terms. One of these is Rich Owings' *GPS Mapping – Make Your Own Maps*. Owings writes extensively on which receiver is correct for which purposes, which software to choose and instructions on how to use it. Personally he initially resented the concept of using a GPS on outdoor adventures. He was fascinated with maps or “with reading the land” (Owings 2005:1), and enjoyed the act of comparing maps with what he saw before him: “It felt great to take a topographic map and translate what I saw on paper into the landscape before me” (Ibid:1). With the acquisition of a GPS receiver his interest shifted from the reading of landscape and maps to the construction of personal maps through the generation of waypoints and tracks and the subsequent manipulation of these. The joy of reading the land seems to have been replaced by the joy of reviewing records of his movements in it and playing with a sophisticated toy. His fascination has become the instrument's functionality, of

which a central aspect is its ability to “audibly [tell] you where and when to turn” (Ibid:3).

The GPS receiver has for its increasing number of users greatly altered the nature of outdoor adventure. It has even created outdoor activities wholly based on this technology. The most common example of this kind of activity is Geocaching: “a great sport that lets you use your GPS to locate hidden ‘treasures’” (Ibid:15). Another is the Degree Confluence Project which “aims to have people visit every location across the globe where a full degree of latitude and longitude meet, and post photos of these locations online” (Ibid:15). One is a global treasure-hunt, the other seemingly a form of global orienteering. And both are based entirely on sophisticated technology without which they would be impossible to practice. So, as this technology has fostered entirely new outdoor activities, it surely has the ability to alter the conditions of practice for others.

Other devices based on GPS tracking made to record your movements are also hitting the market. One example is the SlopeTracker, a specialised, satellite-based tracking device that gives you a detailed account of your movements, time on the snow, difficulty, incline, level of performance and even calorie-burn. On the Norwegian web-page it is presented under the heading “Holder du mål?” which translates as something like “Are you good enough?” (Slope Tracker 2009). Another is the SkiLog, a device through which you can “[t]rack your days skiing and download to your PC and re-live the experience on a 3D view of the resort on Google Earth” (Ski Net UK 2009). These are great examples of the tendency to quantify and compare endeavours that would otherwise be graded through an individual perception of quality.

Owings states that GPS technology has altered the nature of his outdoor recreation. He chooses different routes and spends time on generating his own maps and records of his trips (Owings 2005). All the while without questioning the ways in which it is altering his way of conducting outdoor activity. His concern is with the magnificent ability the device has for telling you where you

were, where you are and where you are going. The element of exploration is altered as a result of the implementation of this technology. The landscape may be just as new, just as unknown. But your position in relation to it is no longer a matter of your own ability to determine it, and this alters the relation between the individual and the landscape. The instrument in your pocket can unveil the details of your journey at any point, and quantifies your experience while you are living it. The GPS stores everything but the experience itself; *that* still only resides in the mind that has experienced it.

Judging from the attitudes displayed in internet forums on websites such as FriFlyt, there seems to be an increasing tendency to see maps and compasses as superfluous due to the simplicity of using a GPS. As the technology improves with regard to usability, battery life and durability when subjected to extreme weather and wear, people come to trust it more and more. This is also reflected in the forums, where attitudes displayed seem to change over time. Looking at a forum where the last entry was made in 2005 it is evident that many still pressed the importance of bringing paper maps and compasses (FriFlyt 2005). When taking a look at another forum, started almost four years later, the discussions seem to revolve around brands and possible further developments of the technology that could render the gadget an even better solution to the problem of excess risk (FriFlyt 2009).

Geographer and freerider Fadnes does not usually make use of a GPS receiver on his freeride adventures. When he did he found that it greatly affected his perception and interpretation of the landscape. While trying to find his way in the wild Fadnes was influenced by the technology in a manner that altered the way he perceived the landscape. The relation between the user and the landscape became erroneous because of the information presented by the technology and contributed to a misperception of the situation. “I found that technology – or in this case bringing a GPS – strongly influences my decisions on a trip” (Fadnes: interview 18.12.08).

So what does this technological development and its implementation in the context of an activity like freeriding do to our ability to find our own way in nature? Fadnes' misinterpretation of the information yielded by the GPS receiver was a result of lack of training using the technology, resulting in a misperception of his position in the landscape, and rendering him more comfortable navigating without it. But with constant use there is a danger of becoming dependent on constantly being informed about position and direction, a dependency that would render the users less able to navigate independently. There is also the danger of failing to see the land while moving through it, simply because one no longer has to in order to find the way. I think, like Postman suggested in *Technopoly*, that it in this respect "is important to remember what can be done without computers, and it is also important to remind ourselves what may be lost when we do use them" (Postman 1993:120).

Surveying the World Online

There are many different internet based services which allow you to interact with geographical information. Some of them are called Web Map Services (hereafter referred to by the acronym WMS), a standard model for the presentation of geospatial information created by the Open GIS Consortium. In short it "produces maps of georeferenced data" (Open GIS Consortium 2002). The availability of WMS and other geographical services are, besides GPS, perhaps the kind of map technology that influences freeriding and outdoor recreational activity the most. Many of these services enable users to browse maps and satellite imagery available through the website, in addition to pictures, descriptions, GPS-tracks, directions, tips and tricks posted by other users. Google Earth, a virtual program that allows users to survey the globe via satellite imagery, maps and other geographic information, is currently the most prominent of these. To "google" something seems to have become the foremost manner in which to quickly and easily obtain information, and with the launch of Google Earth in 2005 it became possible to "google" the planet. According to Google's own website, Google Earth "is the only program that can deliver a 3D digital

model of the entire earth via the Internet” (Google Press Center 2008). Users can create layers of information, photos and videos easily and subsequently share it with other users as the website enables the “creation and display of third party and user generated content” (Google Press Center 2006). It is a web-based guide to the world, in part user defined, where the solid facts, those of the earth’s actual geographical features, provide the basis upon which users can impose their own experiences and perceptions.

Fadnes uses WMS regularly to browse the landscape. He can scan through the mountainous regions of the world at leisure, find other people’s pictures and accounts of their experiences and determine which region or mountain is the most spectacular, the most dangerous or the most easily accessible. According to Fadnes this technology brings him closer to reality.

“All forms of geographic services that bring me closer to reality will help me create a better impression of what challenges lie ahead. There is an array of different services – with Google Earth in the lead – that makes me and others able to form a very, very good impression of a landscape in which we have never been” (Fadnes: interview 18.12.2009).

It is clear that WMS and GPS both are tools that facilitate the use of wilderness for recreational purposes. Through the provision of information and the opportunity to later integrate one’s own experiences these technologies facilitate planning, execution and review of any given activity in the wild. By using these technologies one is also able to reduce the feeling of venturing into the wild and unknown, a feeling that is sought by some and dreaded by others. Places are made familiar prior to the first visit; the secrets of the landscape are revealed, not just as a drawing of lines, dots and polygons, but in the form of an interactive tool in which you can see images or relatively accurate 3D models of the actual landscape from different angles, and relatively accurately determine the shape and form of what lies ahead.

Fadnes states that these technologies bring him closer to reality; I think it more correct to say that they bring us closer to our *interpretations* of reality. And that may actually result in an increased distance between us and nature. If ready-

made interpretations are so easily accessible the need to interpret it on an individual basis disappears. “Evidently, since technological information realizes itself, the demands on the realization skills of people decline to nothing” (Borgmann 1999:182). It seems as though the extreme ease with which one is able to navigate anywhere at any time by using these technologies, can result in changes in perception and perspective that could turn out to be of a non-beneficial nature both to us as a species and nature as a whole. Our experience is diminished through a decline in the level of difficulty, and nature is reduced to an arena, or a stage on which to perform.

2. Information, Knowledge and Facilitation

Luckily for those of us who see it as their right, privilege, calling or other, to veer around amongst our country's snow-capped peaks looking for suitable descents, cartography is an old and reasonably accurate science. It is a science that facilitates access through the organisation and simplification of information. This facilitation happens by way of the technologies of interpretation and navigation I have described and discussed in the previous chapter, as they are implemented in our interaction with wild nature. And the results of this go beyond a mere ease of access. These technologies help us form knowledge of nature through their depictions, but it is important to keep in mind that knowledge of the technology is not synonymous with knowledge of nature.

The aim of this chapter is to examine how and why these technologies change our relation to landscape. I will discuss the nature of information in relation to wilderness, to direct knowledge, to maps and to perception of nature. I will then handle the issues connected to an anthropocentric vision of the world before moving on to facilitation. The aim of this final section is to clarify the role and influence of various kinds of technological facilitators in our relation to the landscapes in which we move.

The Nature of Information

According to Denis Wood "mapping is a way of making experience of the environment shareable" (Wood 1992:79); it is a way of communicating landscape to those who have never seen it, using the common language of the topographical map. And through this communication, the cartographers and the geographers are facilitating access to that landscape. In the words of Albert Borgmann "the cartographic information will lift the veil of ignorance and open up the lay of the land" (Borgmann 1999:78). By way of cartographic information we are granted a new view of the land, we gain a different perspective, and that which has lain before us is unveiled, opened up, demystified, wrested of its

secrets; it becomes known. But it is not known to the surveyor of maps as it is to the surveyor of the land. Borgmann uses the concept of direct and indirect knowledge in his work *Holding on to Reality*, and explains the difference by using the French verb *connaître* to describe direct knowledge and *savoir* to describe indirect such (Ibid:14). In Norwegian we use the words *kjenne* and *vite* respectively to differentiate between the two. The former embodies intimate knowledge, the latter merely the knowledge of the idea. Consider the statements *I know nature* and *I know all about nature*. The first refers to direct and the second to indirect knowledge; the first tells us something about skill and experience, the second about abstract information. In the context of our interaction with wild nature, or wilderness as it is commonly referred to, the difference is vast and, with regard to our interaction with that natural environment, of great importance. If one *knows* the wilderness, then it is no longer wilderness. It is those who know *about* wilderness who are concerned with gathering information about it, in their attempt to create direct knowledge of it, failing to realise that the key to this knowledge does not lie in the endless amounts of available information.

Wilderness and Information

Wilderness carries strong symbolic value. It has been a symbol of unknown danger; a source of awe; a thing to be feared and avoided; a symbol of peace, harmony, balance; something to be coveted, sought after and protected; it has been seen as untameable, unpredictable and as fragile, vulnerable, beautiful. Perception of it is dependent on the knowledge one possesses about it, and on the approach one chooses towards it. Information has the ability to dispel fear, and through the generation of knowledge of what a thing is we also learn what it is not, and are able to create a more accurate and nuanced image in our minds. The technology enabling us to pinpoint where it is, what it looks like and where we are in relation to it is part of this process of demystification of the wild, of the elimination of the unknown and thereby the expansion of the human domain. We are paving the wilderness with layers of readily analysed information, facilitating access through the provision of opportunities to create knowledge.

Information can be a source of confidence, freedom, power and opportunity. It enables us to draw conclusions and to find solutions. It can also be the cause of confusion, of false priorities and altered focus. There is so much information to be accessed, it is often difficult to evaluate the source, and the availability itself becomes a certain measure of worth. The value of information seems to be determined by availability in the eyes of some; if one can access something it is deemed to be worth spending time on, and if something cannot be easily found it is not.

It is essential that we “do not confuse information with understanding” (Postman 1993:184), or with direct knowledge. When approaching a snow-covered mountain with the aim to challenge yourself, your skill, courage and strength, by attempting to negotiate a steep face on skis or snowboard, the power of information is such that if it is not developed into knowledge, respect, understanding and skill, it might lead you to that famous point of no return. Skill is achieved through experience and is not something that can be created through theoretical study. Although you may come to know nature indirectly through the study of books and charts, you will not have obtained direct knowledge by way of this method. That will be a product of the conversion of theoretical, abstract information through experience to intimate knowledge. In contemporary society “our knowledge by description has displaced our knowledge by acquaintance” (Ibid:218). The knowledge acquired by acquaintance of the natural environment is what is found in communities that live in close connection with nature and have firsthand experience with the natural environment on which we all depend for sustenance. It is a form of direct knowledge – often called traditional or local knowledge – and is, depending on the applied hierarchy of value, either revered or disregarded by those in possession of knowledge by description.

When discussing information and different kinds of knowledge it is important to distinguish between them. The differences are great, and carry particular significance in this context. The conversion of information – the processing of computer generated grids, dots and lines, polygons and curves – is

a key ability in the utilisation of map technology. But, “[w]hat does it take for information to become knowledge?” (Rothenberg 2002:175). How are the streams of information converted into the tool we need and presumably want; the actual knowledge of the landscape? The fact that the information resides in a machine in one’s possession does not make it that person’s knowledge. In order to clarify the difference between the two I have chosen to use Rothenberg’s interpretation. He states that information “is what can be counted, measured, stored up, turned into a material object and handled from one person or one file cabinet to another” (Ibid.), while knowledge is “learning what to do with information, how to pick and choose from among the details, how to make an informed decision when you absolutely need to” (Ibid.). This process of picking and choosing among the collections of fragmented information is, in digital map technology, done by the software and hardware employed in the process. Historically it was done by cartographers. In that sense the actual knowledge of the landscape now resides in the software and hardware, the tools, just like it used to reside with the cartographers, the masters. What we – the users of the maps and the technologies – receive, is merely processed geographical information that facilitates our movement through the landscape. The actual knowledge of the land has to be obtained by way of this movement coupled with careful observation.

Information Technology versus Direct Knowledge

“The culture that embraces movement will be a technical culture, one not afraid to shape the surrounding world towards its own stated designs” (Rothenberg 1993:68), a culture in which movement is the key, the goal and the means, where the quest is the true meaning, purpose and reason. A culture where technology is implemented in order to shape the environment after our own wishes and fashions, or extend our abilities so as to facilitate our movement in our surrounding world. In such a culture “[h]uman purpose becomes the one purpose that matters, justifying a wholesale appropriation of everything we may

discover about nature to make the world better for us” (Ibid:70). It is a culture where the limits are set by our ideas of the surrounding world, not by the surrounding world itself. Where improvements are made to support our perceived needs, and where “[a]nything we find that does not support such improvement is best ignored. Technology becomes the sole criteria for truth” (Ibid:70). It is a culture where a focus on information provided by means of technology prevails, and where the intricate understanding that is built on foundations of direct knowledge is devalued. This brings us to the question of direct knowledge and its place and role in technologically mediated interaction with nature. If technology becomes the only measure for truth, what then happens to direct knowledge? Can technology replace the kind of knowledge that has been developed over the course of generations by people living in close interaction with their surroundings? Is technology a good enough measure for truth?

If we consider Albert Borgmann’s suggestion that “[i]nformation through the power of technology steps forward as a rival of reality” (Borgmann 1999:2), it seems unlikely. “Information gets more and more detached from reality” (Ibid:182), and the tendency to think that technologically generated and mediated information is of the same nature and kind as that generated and mediated by experience and individual perception, has the potential to alter the very way in which we see the world we live in, our role in it, and our responsibilities towards it. Borgmann claims in his critique of information technology that “[w]hatever is touched by information technology detaches itself from its foundation” (Ibid:5). It loses connection with its origin and becomes floating fragments. In this context we are presented with floating fragments of spatial information and descriptions. Easily retrieved, easily consumed, and easily lost. The opposite of direct knowledge, which is obtained through experience and thereby becomes part of one’s inherent set of tools. And in addition to the fleeting nature of this information, it is built on foundations that are simplifications of the real, interpretations that have undergone various processes in order to render it legible, aesthetically pleasant and easy to look at. The problem with this is when these interpretations of the real are presented as substitutes for direct knowledge,

because, in the words of Fadnes: “You cannot copy nature into technology. There will always be some degradation of the actual. We can chase after technology all we want, but it will never be a completely accurate depiction of the real” (Fadnes: interview 18.12.2009).

Geographical information systems are tools constructed to analyse and organise information. But that does not make them the harbingers of knowledge. That can only be accumulated by the individual, and becomes something in his or her possession, something personal, while the endless stream of information is public and in principle belongs to no one. Rothenberg seems to think that the increased availability of information has changed the way we approach and handle it. He claims that “we are seduced by its magnitude, and are encouraged to jump from one place to another with smaller and smaller details at each place and no goal for the game but to keep moving” (Rothenberg 2002:180). Or as Postman suggests, “we are driven to fill our lives with the quest to “access” information” (Postman 1993:61). The information loses its value; it is always there to be accessed at need. And that in turn influences our attitudes to knowledge, as we sometimes do not seem to appreciate the important distinction between the two.

The Nature of Maps

Denis Wood, John Pickles, Brian J. Harley, Denis Cosgrove, Mark Monmonier and David Turnbull all have in common that they have questioned the map and the making of it in one way or another (Wood 1992, Pickles 1995 and 2004, Harley in Laxton (ed.) 2001, Cosgrove 1999 and 2008, Monmonier 1996, Turnbull 1989 and 2000). Albeit in widely different manners and from a variety of perspectives, their findings all point to the fact that all maps are in some way or other influenced by the people involved in their making. This has also received some attention in the work *Mapping – Ways of Representing the World* by Dorling and Fairbairn: “Maps have always presented pictures of “truth” and just as many people have many different truths so there are many

maps to be drawn” (Dorling and Fairbairn 1997:142). A map is a simplification of reality, and in the course of its construction reality is simplified through the generalisations of natural features and the omitting of place names in order to improve legibility. By overlooking the details it is easier to understand what we see in our interpretations of reality.

Perspective and Perception

We have looked at maps most of our lives, using them as reference and as the basis for our cognitive image of the world. The maps actually “become evidence of reality in themselves and can only be challenged through the production of other maps or theories “(Turnbull 1989:54). Turnbull also suggests that the nature of our experience of our environment is one of active construction.

“Since we cannot have a pure unmediated experience of our environment, that experience is better understood as an active construction resulting from a dialectical interaction between the lumps in the landscape and our imposed connections with those lumps” (Ibid:61).

If we then also consider that “spatiality is fundamental to our consciousness and our understanding of experience” (Ibid:1), the importance of maps to our understanding and experience of the world is emphasised. These are perhaps also reasons why there are so few critiques of GIS. Why question a set of tools that facilitates the transfer of spatial knowledge? How can one critique the layering of information and the digital juxtaposition of maps? According to Pickles “the danger arises that a geography that accepts GIS too readily will become a discipline dominated by facts rather than by understanding” (Pickles 1995:36). What is lost if we come to depend on this exceedingly easy way of handling spatial information? The human mind is quite different from computer systems and has vastly different strengths. While massive mathematical calculations are best performed by machines we have built, things like reasoning and intricate understanding are more difficult to create synthetically. According to Gunnar

Breivik, professor of social sciences and former headmaster at the Norwegian School of Sport Sciences (NIH), “[o]ur superiority is displayed through our intuitive ability, our ability to analyse wholes, to find patterns and see connections” (Breivik 1998a:23). John Pickles also presses this point.

“The human mind uses a myriad of poorly understood methods for structuring geographical knowledge; it is GIS’s supreme conceit that one can structure a useful representation of geographical knowledge in the absurdly primitive domain of the digital computer, just as it is cartography’s conceit that one can accomplish the same objective with pen and paper.” (Pickles 1995:36)

Humans have a tendency towards simplification and organisation, and maps are a good example of just that. “Maps are attractive because they are visual and they stimulate the imagination, and perhaps also because they present the world as simpler, more orderly, and less dynamic than it really is” (Ibid:48). Consider the nature of paper-maps; the simplifications, the omitting of place-names for the sake of readability, the generalisation of natural features for the same reason. Consider the changing nature of nature and how much work would be required to ensure complete accuracy. In a way maps seem secure, safe, as they are immobile depictions of a moving world. They create an impression of a motionless environment, a way to abate the human fear of the unpredictability of nature. When aiming to ride a snow-covered mountain this unpredictability is immediate. And it is not necessarily made less so through the study of simplified interpretations and accounts of reality.

McHarg focuses on the understanding of the environment and the importance of this in the development and use of nature and its resources, in his work *Design with Nature*. He presses the point that “[t]he place must be understood to be used and managed well” (McHarg 1971:144). But how do we create this kind of understanding? How can planners and policy-makers, freeriders and outdoor enthusiasts gain the kind of understanding that will result

in the correct management of and interaction with nature? How do simplified interpretations influence our understanding of reality? These questions are difficult to answer, but it seems likely that further automation and digitalisation of maps and the map-making process may well result in increasingly sophisticated analysis, more accurate numbers; in increasing amounts of information. But that is not synonymous with a better understanding of that information or the place in which it was gathered. “The more we value exactness, which is primarily a consequence of technology, the less we are able to respect the elusive and exclusive parts of human decision and propriety” (Rothenberg 1993:47). Better understanding will more likely be a result of direct knowledge of the landscape than of increased implementation of technological mediators.

Accuracy, Order and Perception of the Real

Regarding the accuracy of digital maps, 3D visualisations and GPS technology there are several viewpoints. When listening to the people representing the technology, some of whom spoke during the seminar titled Modern Methods of Data Capture, one is inclined to think it is absolute. Until they start to describe practices like ‘smoothing the curves’ in the processing of data collected through laser-scanning. The generation of topographical curves is subject to strict demands for accuracy, and they are checked against manually generated curves. But because the raw curves resulting from laser scanning are what Håkon Dåsnes from Blom Geomatics AS referred to as “messy, although detailed” (Moderne Datafangstmetoder: Gardermoen 10.11.08), these curves, the recordings of the actual curves found in nature, are smoothed out. The purpose of this is to render them more cartographically attractive to look at, and is a good example of the generalisation of natural features for aesthetic reasons. The parameters for this practice of smoothing vary, and result in different presentations of the same terrain (Ibid.). The material we are presented with are therefore subject to variations caused by differing methods of simplification. Rothenberg wrote about this tendency to smooth out the irregularities of nature in

Hand's End: “Coaxing symmetry out of rough material is a powerful testament to the connection between humanity and order. And if the universe too is ordered, we are a little closer to that as well” (Rothenberg 1993:114). We reshape the curves of nature in order to bring ourselves closer to it, but it is likely that what we achieve instead is increased distance. If the world we are presented with through these technologies is actually no more than a human adaptation of reality, how does it bring us closer to the actual landscape?

Another side of this approach to reality and the subsequent interpretations of it is the bureaucratic one. After attending two seminars organised by Norway Digital (Norge Digitalt) at the offices of the Norwegian Mapping Authority (Statens Kartverk) in downtown Oslo, I got a clearer picture of the processes and mechanisms at work at management level. This is a time of transition, when paper files are being digitalised, GIS is being implemented on an increasing number of levels, and new processes have to be developed and understood with regard to planning, communication and analysis. The difficulties facing the people working within this area of government are many, and during the seminars I got to see how these difficulties were approached and with what focus and emphasis they were treated. Much of the challenge in this process revolves around the adaptation of method to the digital format and the communication and exchange of data between the different sections. It seems as though the transitional process is demanding on several levels. Much information is generated, kept and used by different actors with different agendas. The purpose of implementing GIS is the analysis and manipulation of data of many kinds, and this complicates the process. The main reason for this is, as mentioned in the previous chapter, the fact that the various actors use different grid systems, thereby rendering the information extremely difficult and time-consuming to coordinate (Temadataforum: Oslo 6.10.08). Another reason is the fragmented structure of governing bodies. Many smaller municipalities do not have the resources to provide their own data. The complexity of GIS, and a subsequent lack of complete understanding amongst those who are to use these tools, further limits their implementation and use.

The questions posed and the demands made by the audience during the seminars I attended at the Norwegian Mapping Authority were quite often related to issues of orientation, organisation and specification. Representatives of local government, planning and administrative branches uttered concerns about guidelines and standards, or rather about the apparent lack of such. Several examples of mistakes made due to incorrect handling of data were mentioned, and it was evident that the implication of these systems is at times quite problematic. The power of influence these tools have on the perceptions of the landscape and the relation between this and the technological interpretations was also made visible. It appeared that the process required to alter or update the official maps and accompanying plans to allow for the correction of what was referred to as “less essential differences” was quite demanding (Plandataforum: Oslo 26.9.08). What counted was how it appeared in the plans and on the official maps. The digital version of the world, the one constructed by us for the purpose of facilitating its management, had to some extent come to replace the real. It seems as though the perspective of those working with the managerial tools had been generated through the abstraction of the world, and that their perception of the world to a great extent was determined by the information they received by means of these tools. Or, as Albert Borgmann suggested in *Holding On to Reality*: “Information through the power of technology steps forward as a rival of reality” (Borgmann 1999:2).

This said, it is quite understandable that every map cannot at any given time be completely accurate, and that there will be cases where the cartographic material will not correspond with reality. As civil agronomist and architect Erik Aas Jr. wrote in 1977: “Even moderate offsets, for example of climate, availability of nourishment or of the combination of flora or fauna can lead to extensive restructuring. This can alter the landscape radically both visually and as life-environment” (Erik Aas Jr. 1977:131). But at the same time, these minor deviations can clearly result in mistakes being made, important things being overlooked and, in addition, people – environmental planners, lay-men and freeriders alike – may gain a faulty perception of their environment. The

implementation of GIS and the resulting transfer of much of the analytical capacity from the human to the digital domain is bound to be a difficult transitional process. But if it at the same time causes a shift towards a perception of the world where the parameters are set by its digital interpretation, this process is one of dire consequence.

The adaptation of the real to better suit our preferences can be found on all levels of our interaction with nature. We simplify geography in order to make the world more legible and more aesthetically pleasant to look at; we construct tools that help us better cope with our surroundings and our limited abilities. And we change nature where deemed necessary for it to fulfil the purpose we have bestowed upon it. We facilitate our existence to such an extent that existence itself loses some of its value, and we invent tools that have detrimental effects on our individual abilities to cope with the world. Or, as Postman wrote on the rapid technological developments in the 19th century: “We had learned how to invent things, and the question of why we invent things receded in importance” (Postman 1993:42).

Anthropocentric vision

The role of vision in our relation to our surroundings is a paramount aspect of digital map technology. The focus is on the invention of better methods for us to survey the world, as our own perspective is insufficient in the processes we are imposing on our environments. The visual qualities of maps and the visual effects of the publication of GPS tracks are related to a desire to see the land and our imprint upon it. And with the help of these technologies we are now able to see ourselves in our surroundings in a whole new way. If we here again consider the GPS receiver, where the position of the receiver – and the person holding it – is displayed as a dot on the screen, it is in a way the physical embodiment of the anthropocentric view of the world. When using a GPS receiver we are represented as a dot in a digital depiction of the world, clearly visible as being in that particular place. It is a digitalised world, an electronic

representation, but we can nonetheless see ourselves there. “You will look into the computer screen and see reality” (Pickles 1995:8). An ominous prediction made in the mid nineties that is closer to the truth than one may think. Even though what we see on the screen is not reality, it has to some extent come to be perceived as such. A reason for this is our excessive focus on the visual.

According to Macnaghten and Urry the “general ‘hegemony of vision’ has characterised western social thought and culture over the past few centuries” (Macnaghten and Urry 1998:109). Our approach to space is influenced by this and is reflected in the emphasis on views and panoramas in western society (Ibid.). Maps are a way in which to control the landscape as we see it. Through the simplification and generalisation of the landscape that result from the production of maps we create the landscape anew in our minds, rendering it easier to look at and therefore easier to understand. “[M]aps deploy the visual sense as a means of control and surveillance” (Ibid:121). By seeing the world and recreating a visual version we gain control and are able to survey it. And this in turn facilitates our movement in it, makes it easier to relate to and easier to adapt to our needs. “Mapping is the dimension of naturalness and predictability” (Borgmann 1999:184). GIS and WMS are developments upon that principle, the material foundations are maps and geographic images, but the focus is on our potential for control of the landscape. By making it predictable we facilitate consumption and manipulation of what the images represent. In fact, mapping practices and services in general can be said to be embodiments of anthropocentric vision. They are generalisations and simplifications, meaning that a process of selection has been undertaken prior to their presentation. This process is highly likely to be based on an instrumental value system, where selection is done according to human preferences. Consider here Denis Wood’s claim that “without a theme there is no map – it is not of some *place* without being of some *thing*” (Wood 1992:188). Nature is the place, but we determine the thing. The maps we make are our interpretations, made with emphasis on our matters of interest.

In the end this is about how we relate to the world, how we see our position and role in the landscape. Even though we may admire the beauty of a mountain, the pristine look of the untouched snow, there seems to be a prevailing wish to see oneself on the mountain, one's own tracks in that snow. Nature's own beauty takes second place to that of the beauty of one's own experience. A banal example of this kind of mentality is the way most people take holiday pictures. If there is a great mountain one wants to put in an album, most people will put a person in front of it before pressing the button. This is an expression of our inability to see ourselves as part of nature. Our focus is on ourselves *in* nature, as separate from it and at the centre of our vision.

When freeriding becomes focused on achievement as can be measured through the quantification of experience, it has become an activity in which nature is only the stage set, the backdrop. The view of nature as the provider of opportunity for the experience, and as element with which one can seek unity in order to enhance that experience, disappears when this focus on quantification prevails. It is easy to adopt the opinion that nature is to a freerider only the value bestowed upon it through its qualities as the arena for the creation of subjective experience, but that is to commit a fallacy. "We commit the subjectivist fallacy if we think all values lie in subjective experience, and, worse still, the anthropocentrist fallacy if we think all values lie in human options and preferences" (Rolston III in Light and Rolston III 2003:146). The mountains as natural features are what enable the riders to fulfil their desires, but to argue that to be the only value they possess would be to display a complete disregard for nature as a thing outside of ourselves. If only our desires and wants bestow value upon nature, would that which we do not appreciate then be of no significance? If an element, assumed to be insignificant, is fulfilling a role of its own, a role without which the construct would in some way collapse, how can one then say that it has no value unless it is valued by us? If it is contributing to balance it has value other than that we bestow upon it, and upsetting that balance will entail some kind of loss.

If we consider freeriding as a way in which to achieve a feeling of unity with the elements, it seems as though the activity may be seen as an escape from anthropocentrism, a venture into the wild and away from the basic anthropocentric value-system. One of the pioneers of extreme skiing, the Italian skier Stefano De Benedetti, mentioned a feeling of smallness and insignificance in relation to the mountain and its wildness as prominent when he rode the east face of Mont Blanc in 1979 (Obenhaus 2007). And this relational change of perspective may act as a motivation for seeking bigger, more impressive faces to ride. Riding a mountain may not be about conquering it, but instead about finding a way to interact with it, as a representative of some part of nature that will remain outside of our control and which therefore embodies the confrontation between human endeavour and natural wildness. Fadnes expresses an interesting view of this relation when questioned about how he approaches a mountain as a freerider.

“Freeriding is not a fight against the elements. I look at the mountain perhaps a little like a labyrinth or a riddle. There is a solution to the mountain, an opportunity on the mountain. The mountain is not against me but it expects something of me. It expects me to have the insight and the competence to deal with it, and if I cannot do that I am not welcome. Then I can just turn around. So, that it is conquered means that I manage to solve the riddle of the mountain” (Fadnes: interview 18.12.2008).

Fadnes here illustrates an approach that emphasises the actual interaction between himself and the environment, thereby demonstrating a perception of nature as something more than an object to be conquered. Nonetheless he remains focused on how he can solve the riddle of that particular piece of nature, entailing a continued focus on the human power to overcome our environment. One of the consequences of an anthropocentric vision of the world is a prevailing focus on how we can adapt it to our needs. We construct maps and management tools in order to gain a perspective conducive to our manipulation of our environments, and we construct tools of interaction that promote our position in

relation to the landscape. In short we employ technology to facilitate our existence in whatever way we perceive to be necessary.

Facilitation

To facilitate means to make something easy or easier to do, and is in a sense the general purpose of technological development: to make things easier, more organised, simpler, less demanding. It is an expression of our only way of being in the world, our tendency to build and adapt our surroundings to our needs. “Making and transforming is our single entry into the natural realm of progress” (Rothenberg 1993:68). And so we “make the world into what we need from the world” (Ibid:32), and our needs are more often than not connected to making our existence easier and safer. It is in our nature, a nature we would have great difficulty denying, according to David Harvey in his work *Spaces of Hope*: “We cannot ever avoid (any more than bees or beavers) asserting our own species identity, being expressive of who we are and what we can become, and putting our species capacities and powers to work in the world we inhabit” (Harvey 2000:213). We will continue to generally facilitate our existence and thereby our interaction with the natural landscape, be it in the form of equipment, technical clothing, navigational aids or map technology.

“Most of the human life takes place in techno-culture, techno-society, in an artificial environment” (Breivik 1973:21). And we now bring expressions of this artificial environment with us into the wilderness in the form of technological aids. “Techno-culture has come tumbling so fast that we in the course of a few generations are about to lose touch with our historical past. We are about to lose our footing” (Breivik 1974:5). Chances are the footing Breivik considered to be precarious in 1974 is now long gone. Sophisticated technology is used in most kinds of outdoor recreation, there seems to be no end to the available gadgets and aids that can make our meeting with wild nature easier, more comfortable and more fun. Our escape from the artificial environment of our everyday lives is momentary, and our interaction with wild nature is therefore not one where

balance is sought. We want our escape to be as *effective* as possible, we want to experience that which we have missed in our regular lives, and the commercial industries around these activities thrive on just that. The fact that this effective, facilitated escape is a less and less *complete* escape is of little concern.

If the intention of seeking wild nature is to experience contrast and change from our everyday lives, the inclusion of tools like the GPS receiver may in fact counteract it. This technology serves a purpose similar to the construction of chairlifts, although on a psychological rather than physical level, as it facilitates movement and diminishes the need for exertion. It is our time's continuation of facilitation like the posting of signs and marking of trails, a practice that has been criticised by some. Johan Borgen was one of them:

“The marking of dangerous routes is all good and well – given that it is carried out consistently, if it is not it is worse than nothing – but when the posting of signs and markings tend towards the fool-proof, then one deprives the whole business of its point. Just notice how tired one's legs become when one have nothing in the terrain on which to speculate” (Borgen in Breivik and Løvmo 1978:112).

According to Rothenberg “technology lets us see only what it is able to see” (Rothenberg 1993:111). With regard to digital map technologies and our relation to nature this is of unparalleled significance. These technologies are about providing perspective on the landscape, on nature, on our surroundings. But since mapping practices and technologies are based on simplifications of the world, it is clear that they are unable to provide a complete and nuanced view of reality. “The world is always greater than our collective interpretations of it. Yet the more impressed we are with the amount that machines can do, the harder it is to conceive of aspects of the world beyond their logic of operation” (Ibid:111). We are seduced by simplicity, and by way of this seduction we lose some of our ability to see the world as it is in its complexity. Digital map technologies are serving us landscape in easily consumed portions, and we are led around by an

electronic guide. The lure of technological aids is depriving us of the real, as we sacrifice our direct connection with and understanding of that from which we sprung at the altar of our own inventions.

It has been suggested that “[e]very form of outdoor recreation based on complicated and comprehensive equipment reduces the experiences of the participants from nature-experience to status-experience” (Høgfjellsskolen norsk alpincenter 1977:14). I find this to be too definite; it is still possible to have a great experience of nature while freeriding, even though the activity is completely based on complicated technological equipment. In fact it is the excellence of the equipment that promotes the opportunity to experience nature while participating in that particular activity, as one is able to focus on seeing and exploring rather than worrying about breaking a ski. But there is also some truth in the statement. These kinds of activities easily turn into vehicles for creation of identity and social assertion, rather than being practiced for the sake of the experience itself. I think this varies as much within the activity as it does between activities. Nonetheless it cannot be ignored that facilitation can be both a means by which to pursue status, and an actual cause of this pursuit.

Equipped to Ride a Mountain

Freeriding is about approaching and mastering nature. Mastery is determined by the approach, and by the implemented equipment technology. A freerider is dependent on this technology in order to begin his or her quest to ride a mountain, and the better it is, the less physical demand there is on the individual. This technology actually influences the relationship between nature and the rider, and changes the nature of the activity. “With the help of different hardware we can moderate the demands of the environment to such an extent that nature becomes mostly an arena for the practice of technique” (Lien 1976:20). The development of equipment that diminishes difficulties posed by terrain or snow conditions has rendered freeriding a sport in which the limits to a great extent are set by the technology, rather than by the individual or by nature. “If

one starts utilising increasingly advanced technical equipment in order to reduce environmental difficulty, then the demands on the performer remains the same, in spite of the choice of an “impossible” route” (Ibid.).

The development of technical clothing made to withstand extreme conditions and of specialised skis and snowboards, boots and bindings, plays a significant part in the progress of freeriding as a sport. Without the specialised equipment it would require a lot more training and skill to perform as riders do today. In order to ski or snowboard in deep snow you need equipment that will ‘float’, and in order to ski or snowboard on wind-packed and icy snow you need stiff and heavy equipment. Wider skis, in some cases resembling water-skis, and stiffer, longer snowboards enable the riders to handle more difficult conditions and more difficult terrain. This equipment does, to a certain extent, compensate for lack of skill. It does not, however, compensate for a lack of routine and experience. The technology in itself will not make you able to make the right decisions.

Freeride skis and snowboards are not the only important part of freeriding equipment, although it is that on which a certain extent of one’s performance relies. The safety-equipment is an important part of the package as well. Most wear helmets and back-protectors, some wear hip- and knee-pads and almost every freerider wears a backpack when venturing away from the ski-resorts. Most riders carry a shovel and a probe, a safety measure completed by an avalanche beacon; an electronic device made for the search and rescue of avalanche victims based on the principle of buddy-rescue. The idea is that everyone has a beacon that is set to emit a signal while on the mountain. If members of a group are taken by an avalanche, leaving others clear, the ones who are not buried switch their beacons to the search function and attempt to locate those who are buried. If they succeed in locating the victims they are supposed to use the probe and the shovel in order to pinpoint the location of the victim and then commence to dig them out. The beacon, probe and shovel are standard equipment and mandatory in competitions and on most guided tours.

Another technology that is becoming more common in the freeride context is the ABS-Avalanche Airbag System. It is a backpack containing two large inflatable pillows that increase a person's volume by 170 litres, aiming to keep the user on top of the avalanche, preventing burial and thereby greatly increasing the chance of survival. It works by pulling on a conveniently placed activation handle containing a small explosive capsule that activates a cartridge filled with pure nitrogen. The gas then inflates the airbags immediately. According to the manufacturer's website only three out of 200 people who have been caught by an avalanche while wearing the ABS equipment have been killed (ABS Airbag 2009). This technology is clearly a great contributor to safe interaction with snow-covered mountains, but also has the potential to foster complacency towards avalanches. I have heard people speak of the possibility of avalanche-surfing, to purposefully trigger avalanches in order to surf its surface with the help of this system. It may seem unlikely that many people will engage in such an activity, but the implementation of this kind of equipment creates the possibility.

These technologies all aim at making the sport safer for its participants. The avalanche beacon and the ABS are particularly effective in this respect. They are also the most costly items, and the ones that have a tendency to result in a false sense of security and complacency regarding such unpredictable factors as avalanches. Wearing sophisticated equipment will not be sufficient to ensure survival in many cases, due to the risk of severe trauma resulting from falling or hitting objects while in the masses of sliding snow. In many cases the only way of avoiding an avalanche is not being in the wrong place when it happens. And the only way to avoid that is to acquire the knowledge that enables one to make the correct choices and decisions along the way. Any amount of facilitating technology will not help you do this. Our relation to nature is altered by technological innovation, and people feel secure in dangerous situations because they carry what is often perceived as 'insurance' in the form of technological aids. This leads to decisions and actions that by more experienced mountaineers would be deemed reckless, and to an approach to nature as an arena instead of as

the defining element of which it is crucial to have a high level of knowledge in order to avoid damage to it or to oneself.

3. Freeriding as Industry

Freeriding is amongst what Odden refers to as the new forms of outdoor recreational activity. According to his findings these forms are attracting an increasing number of young people, while the more traditional forms, like cross-country skiing or fishing-trips, are decreasing in popularity (Odden 2008). The traditional forms of outdoor recreation have been connected with the “promotion of simplicity and exposure to the natural surroundings”, and are “believed to have a refining effect on human nature” (Riese and Vorkinn 2002:200). These values seem to be less important in the new forms of outdoor recreation. According to Odden “mastery and challenging one’s own limits” (Odden in Storli 2009:54), are taking centre position there. But one needs not eliminate the other, as long as the outlook on the landscape and the approach to nature are not greatly altered as a result of changing trends. Advanced technological equipment is not in itself a barrier against profound experiences of wild nature, and neither is an emphasis on speed. Instead it becomes a question of maintaining a certain amount of the traditional values of outdoor recreation in its new forms of expression.

In this chapter I will first outline the rise of freeriding as a sport, before discussing the social and cultural aspects. Freeriding has come to support a significant commercial industry, and for the purpose of analysis it is useful to divide the phenomenon of freeriding into two parts. I will present my view of the sport as consisting of an industrial and a cultural aspect. The industry consists of the commercial and organised aspects such as competitions, commercial films, advertising and the array of related and non-related products that are marketed through the sport, while the culture is the basis for a community centred on a common passion for the descent of snow-covered mountains. One is characterised by its focus on the experience and a production of meaning, while the other is recognised by its focus on the commercial, and what the activity represents in the context of identity construction and social standing.

Adventure and Exploration

“Adventure, whether physical or mental, implies breaking into unpenetrated ground, venturing beyond the boundary of normal aptitude, extending oneself to the limit of capacity, courageously facing peril. Life without the chance for such exertions would be for many persons a dreary game, scarcely bearable in its horrible banality.” (Marshall in Callicott and Nelson 1998:88)

Courage and calm, strength and sensitivity; all are virtues in the context of freeriding. In order to practice the sport relatively safely it is necessary to possess some of them all. It is a sport requiring acute observation, quick thinking, acting on instinct and an ability to dispel fear and to act correctly in situations of extreme pressure. But it is not just about risk, or mastery or the conquering of fear or of nature. It is also about being in nature, about experiencing the wild and about feeling small, insignificant, but nonetheless in control, master of the tiny little domain that one occupies while on the way up or down a snow-covered mountain. By venturing out of our constructed realities we get the chance to feel firsthand what kind of position we have in relation to nature. It is a form of adventure. And it is also a form of exploration, or “between the cracks exploring” as Andrew Mclean, an American ski-mountaineer who has specialised in technical descents, said in the documentary *Steep* by Mark Obenhaus (2007). Fadnes shares this view, but expresses it a little differently:

“To me freeriding in the purest sense is about going into nature and looking at mountains with my own eyes. And based on the experience I have, to look at opportunities presented by the mountain. How can I negotiate this terrain with skis on my feet? And then, using what I have seen, to go up and make use of those opportunities that I have found. To me freeriding is a creative challenge” (Fadnes: interview 18.12.2009).

Finding opportunities, negotiating obstacles, using the imagination to find a way to descend; freeriding is about more than speed, more than spectacular

physical acts. But what happens to this creativity when the terms on which it was formed are altered? On one level technological developments open the door to new possibilities. Better skis enable skiing in more difficult terrain, better map and navigation technology facilitates navigation and lowers the bar of access to that terrain. But the opening of a door is not the same as being led through it. The new map technologies are extending our cognitive abilities, rendering these less important, and in this process there is a risk of deterioration of these abilities. “Where there is extension there is the danger of loss” (Rothenberg 1993:53).

A Change in Approach

Freeriding is a sport that has branched off from more conventional kinds of skiing, and was first described as a separate culture in the 1970’s (Berntsen 2008:1). The American mountain-guide and ski mountaineer Bill Briggs skied the Grand Teton in Wyoming, a 4197 metre mountain, in 1971. Briggs’ descent marked the dawn of what was then dubbed ‘extreme skiing’ in the United States. At the same time there were several skiers in Chamonix, France who were doing the same thing and had already been doing it for a while. Chamonix is said to be the birth-place of alpinism (Obenhaus 2007). It was and is still also known as a playground for the elite. People like Jean Marc Boivin, Pierre Tardivel and Anselme Baud climbed the peaks in order to ski their way down mountain-faces with up to 60 degrees incline. To see footage of those runs and consider the equipment they were using then, compared with what is available now, is quite astonishing. Their skis look more like cross-country skis than what they are using in the same kind of terrain today. These guys wanted to “ski where skiing can still be adventure” (Ibid). They left the resorts and explored the mountains, just like the Norwegian pioneers of ski-mountaineering left the valleys and the woods a hundred years earlier (Huntford 2008).

The extreme skiers of the 1970’s and 80’s broke the limits of what was perceived possible and opened up a new world of skiing. They cleared the way to the steepest mountain faces of the world in the imaginations of the coming

generations of skiers. And their exploration was – compared to what freeriders are doing today – conducted in the dark. The riders had access to much less sophisticated technology and much less information than what is common today when approaching snow-covered peaks nobody had ever ridden. In Obenhaus' documentary we get a glimpse of a feeling of a connection with the mountains. In the words of Doug Coombs, one of the pioneers: "Every mountaineer and every skier realises that mountains are a living, breathing thing" (Obenhaus 2007). And he continues: "They're alive, and they make you alive. Or they make you dead" (Ibid.). Coombs died in a fall in La Grave, France in April of 2006, and in the words of his wife Emily Coombs: "The mountain always has the last say" (Obenhaus 2007).

Coombs claimed that every skier sees mountains as living, breathing things, but this is not necessarily true of the contemporary freeride community. The demands on the individual have been lowered to such an extent that this view may never have the chance to develop. There is no perceived need for interaction between rider and mountain when the mountain is reduced to an arena. Even though there is still a form of reverence towards the mountains, technological development has rendered the mountain more of an object to be mastered because one has all the equipment that facilitates this mastery, rather than something one has to cooperate with and approach in spite of the meagre tools at one's disposal. It has become a matter of where we can go with the help of all our relevant technology, instead of a more self-reliant approach where the emphasis was on how far we actually got with the technology we had access to. This development is connected with the desire to perform and to exhibit good performance. If there are tools available that will facilitate this, and one has the means by which to acquire them there is no question of whether this acquisition is beneficial to the perceived value of the experience. This is a question of what we would like our relationship with wild nature to be determined by; our ability to acquire facilitating tools or our ability to interact with an environment of choice. When the focus is on the performance the focus on the experience is diminished and the importance of the technological facilitation is increased.

Technological facilitation has made humans more powerful in the meeting with wild nature, and rendered it the test to which we put our technology rather than that to which we put ourselves.

Culture and Industry

Since the days of the pioneers, freeriding has developed significantly. It is practiced on different terms due to technological development, and has attracted the attention of a steadily growing number of commercial actors. It is important to remain aware that freeride *culture* and the freeride *industry* are mutually reflexive, and that a separation of the two aspects of the activity is impossible. Among the elements pertaining to the cultural aspect are what characterises freeriding as activity; freedom to negotiate the mountain in whatever way one sees fit, to explore the potential of the landscape, and the approach to a mountain as living riddles to be solved on skis. But there are also other factors involved. There is a certain degree of opposition against the more conventional forms of skiing, such as alpine racing, and the conformity of that culture (Telseth 2005, Berntsen 2008). There is also a certain dress-code and a certain way of expression attached to freeride culture (Ibid.). Freeride culture is defined by its playfulness and the tendency to push limits and invent new ways in which to approach a mountainous landscape, and can be seen as a form of opposition towards the organisation, safety and regulation ideals of society (Telseth 2005).

The freeride industry consists of elements tied to the production and consumption of goods. But it is also tied to the production of identity and the consumption of experiences. The industry feeds on the desire to be something and do something special. The image of the sport is one of freedom from convention, courage and imagination, an image sought by many young people. According to Telseth the freerider is “subject to the commercial world” (Ibid:147). He actually goes so far as to say that “the media and the equipment manufacturers deliver the premises for, and define, what gives ‘cred’ in the freeride culture” (Ibid.). The commercial actors construct trends and set the

parameters for what is sought in the activity and in the riders. These then sell their skills, image, style and personality in exchange for free equipment and clothing, salaries or just the opportunity to ride the most amazing mountain faces. Due to the focus on prices, exposure and spectacular stunts these riders and what they represent have removed themselves from the freeride culture – where the focus and object of desire is the free riding – and have rather become a part of the commercial industry. This industry has grown out of an activity that was originally based on ideals of opposition and freedom – ideals that are difficult to unite with commercial perspectives – and where the conditions of practice are in part constituted of limited elements like pristine powder snow and wild nature. The consequence of this may include a diminished position of the ideals and increased pressure on the limited elements.

Cultural Transitions with Technological Traits

Berntsen, Christensen and Telseth all initially label the freeride culture a subculture, a label which in my view is becoming gradually less valid. Through their analysis, both Telseth and Berntsen also present views and findings which support my position (Telseth 2005, Berntsen 2008). Christensen questions the legitimacy of the label and of subculture as phenomenon (Christensen 2001). The concept of subculture is usually used to describe a culture that has in some aspect or other branched off from a more dominant culture. These cultural side-tracks have to be distinct enough to be easily separated from the main culture, focus on specific activities or territorial spaces and gather around special artefacts and values (Clarke et al. 1998:14 in Christensen 2001:21). Christensen presses the importance of the presence of some form of opposition, primarily in symbolic form (Christensen 2001:21). Freeriding fits this description quite well in its initial forms, but as the characteristic cultural traits are adopted into a commercial context this aspect diminishes.

Odden presents a detailed description, based on the work of Stamm and Lamprecht from 1997, of how a subculture becomes a mass-culture in his

doctoral dissertation from 2008: Small groups will practice a new form of activity combined with particular lifestyle elements and an oppositional attitude towards organised sports. This will in turn attract others looking for something out of the ordinary. As these then grow older and new parts of the population become fascinated by the sport, the commercial actors see market potential. The activity grows and market strategies are developed, community happenings are organised and informal competitions appear. The next phase is what Odden calls the fourth stage. This is when the activity has come to be strongly tied to commercial interests, the sub-cultural potential has been all but spent, the competitions are formalised and share common traits with more traditional activities. At the same time the activity becomes more specialised and sub-activities are created (Odden 2008). According to Eriksen the snowboard culture in Hemsedal had already lost the characteristics that rendered it a subculture by the end of the nineties and the time of Christensen's study. In his perspective the prime period of the sport was the beginning of that decade, and by the middle the community was already characterised by increasing commercialisation (Eriksen: interview 09.02.09). According to Odden freeriding is now in this fourth stage. What he presents as the fifth stage is when the activity has become public property and integrated in the established forms of outdoor recreation, when the instigators have lost interest and moved on, and when the sport has stopped growing and developing.

Odden suggests it to be unlikely that freeriding will be practiced by much more than 25% of the population, due to its risk-related and skill-demanding nature (Odden 2008). The development will to a certain extent limit itself, because although specialised equipment compensates for lack of skill, there are still demands on courage and technique that have to be met in order to practice the activity. There are also certain financial prerequisites; the equipment is costly and participants are required to travel to particular locations. Even so I think that the activity will, in a more moderate form, become an integrated part of the more established forms of outdoor recreation. Because, as Odden states, the development is moving in the direction of faster, more action-filled activities

(Ibid.). It also seems as though the activities that gain popularity are activities where the characteristics of the landscape are central elements. Freeriding is the more striking example of this, the landscape and conditions on which it depends being the most particular. But the landscape is fundamental to mountainbiking and kiting as well, and these are all sports where sophisticated equipment enhances human ability to move in the various types of terrain and conditions. To practice them well requires control of the equipment and mastery of the landscape, the ability to read the latter and predict the reactions of the former. But even though these sports can involve high levels of risk and demand expertise on behalf of the individual, they can still be practiced on all levels. The speed and the challenge can be adapted to suit different levels of skill. In that sense these sports are the same as the activities counted as original parts of the tradition of outdoor recreation in Norway, and it is more conducive to the understanding of these sports as phenomena to view them as developments upon the existing base of outdoor recreational culture, rather than wholly new directions.

Generations of our time, where the emphasis on speed and the spectacular is to be found in all aspects of activity and provides purpose in itself, will tend to adapt the traditions they have been introduced to in childhood to suit their search for contrast, escape, fulfilment or challenge. Odden suggests that lack of interest for traditional forms of outdoor recreation will result in decreased recruitment to the new forms because the foundations for the activities are no longer laid in childhood (Odden 2008). In my perspective, formed on the basis of what I have seen among freeriders with young children, the foundations are still laid, only with a slightly different aim and emphasis. Instead of learning to cross-country ski in order to join their parents on the Sunday ski-trips, these children are taught to cross-country ski in order to lay solid foundations for their future abilities as freeride skiers or snowboarders. This is in part a result of improved technology, as safety equipment and sports equipment for children becomes more affordable and of better quality. The focus of outdoor activities has shifted, and as the future freeriders are taught their way around the wilderness it is particularly important

to maintain emphasis on the experience of nature and not merely the physical performance. As the founder of The Norwegian Mountaineering School (Norges Høgfjellsskole), Nils Faarlund, wrote in the magazine UTE: “It is about bringing to life the traditional values of outdoor recreation, the value of the human and the value of nature, in innovative ways” (Faarlund 2009).

Commercialisation

Idealistic elements and motivational factors centred on nature experience are less likely to prevail, as an activity becomes the foundation for a commercial industry. The focus is soon shifted towards measured accomplishment and consumption, making the previous motivations into relics of a more sentimental past. Competitions and competition circuits are formed and a commodity machine grows out of the potential to market goods through the appeal of the sport. Freeriding is utilised frequently to promote brands and sell products in Norway. According to Odden the new forms of outdoor recreation, including freeriding, are “strongly commercialised and used actively in the marketing of products that do not have anything to do with the actual activity” (Odden 2008:267). In addition, the market for freeride films and magazines is significant. This requires footage, pictures and stories. And that, in combination with the increasing number of profiled competitions, in turn creates the phenomenon of the sponsored, full-time freerider. Berntsen suggests that this tendency is causing the sport to move away from what it once represented: “As long as the media and the commercial forces see that they can make money on the sport, values from mainstream sports will rub off on freeriding, and the soul of the sport will gradually disappear” (Berntsen 2008:100).

But can commercialisation and an increased focus on the evaluation of performance destroy the fundamental ideology of an activity like freeriding? Berntsen points to the fact that commercialisation of the sport attracts people on the basis of popularity rather than on the basis of the fundamental ideals of opposition to rules and regulations: “the authenticity of the sport disappears when

more and more people attach themselves to an activity/lifestyle without having the same fundamental values and motivations” (Ibid:77). Participation is driven by the wrong motivational factors, and the culture as it were is watered down. Suddenly the point of being a freerider is being seen on the right mountain with the right outfit and equipment, rather than being in nature while learning to master a skill and experiencing the thrill of the perfect powder turn in spectacular surroundings. This is expressed in the growing number of competitions, media coverage, film-productions and practices such as the publication of experiences via the internet. This latter practice increases the opportunity to display individuality, and is a way to achieve this for riders who do not have the opportunity or skill to compete or to be part of a film-production. If there was nobody there to see your turns, there are other ways to make them visible to the world. This tendency further intensifies the exhibitionistic motivation for the practice of the sport, and further diminishes those linked to nature experience and the more traditional values of outdoor recreation such as “to enjoy peace and quiet” and the “[i]nteraction with the physical environment” (Riese and Vorkinn 2002:200).

Participants in adventure sports are typically resourceful people; their activities of choice demand purchase of expensive equipment, time to travel and opportunity to develop the necessary skills. This is a good foundation for a commercial market of goods and services, and considering that freeriding plays a role in the construction of identity – which I will handle in a subsequent section – the market stretches far beyond the mountains and the ski-lifts. The media and advertising industry use freeriding, the mountains and what is portrayed as a seemingly care-free lifestyle filled with joyful challenge, to tempt and to remind people of lives they could lead. By connecting products to desired lifestyles, these commercial actors are exploiting the freeride phenomenon. Technical clothing and accessories made for extreme conditions are to an increasing extent used in everyday situations. Expedition jackets are commonly seen on city subways, and backpacks with compartments for shovels and probes frequently contain laptops and notebooks instead. One of the results of this trend is that

anyone can appear to be a merited explorer, or freerider, at any time. As Ingemar Ahlström writes in his contribution to *Friluftshistoria*: “Dressed in jungle boots, wilderness hat and survival jacket with nineteen pockets one drives a jeep to the pub at Stureplan [in the centre of Stockholm]” (Ahlström in Sandell and Sörlin 2000:179). Clothing and gear that signal connection with freeriding can now be seen everywhere, creating a much larger market than what results from the sport itself, and significantly increasing the commercial potential. While as these goods used to be reserved for the situations they were made for, they are now part of a greater fashion scene.

Correct Consumption as Cultural Symbol

In the industry that has been created as a result of the increased popularity of freeriding, the focus is on the consumption of goods in the form of equipment, clothing, films, magazines and other, unrelated products. These goods are all contributing elements in the process of constructing an identity, a reason why people can be seen walking around in cities wearing expedition gear – and also why more and more clothes hardly fit for expeditions bear names implying that they are. With regard to the role of a search for something that stands apart from our everyday lives as motivation for the practice of sports like freeriding, it is here interesting to consider the current marketing strategies of the clothing brand Rip Curl. The slogan that appears on their current collection is ‘My Search’. This little phrase carries a connotation of individuality and exploration, symbolising the personal quest. For what needs not be specified, as the social tendency is that we are each to find our own.

The potential purchase of identity is also the reason why it is important for the brands to be sold in the correct outlets, or core-stores, so as not to appear too mainstream but rather be seen as representing the actual culture with which the people buying the goods want to be identified. If a brand is sold in too many outlets that are not associated with the correct sport or community it has ‘sold-out’, or in other words sacrificed its integrity for the sake of distribution. The

manufacturers are sponsoring riders, movies and competitions in order to become representative of a culture and subsequently appear attractive to the people who are a part of – or who admire or want to become part of – that culture. And this chain then comes to constitute the freeride industry. An industry built on an activity that originally represented ideals of freedom from rules and opposition towards set conventions. An activity that in its most fundamental variety worships the pristine, the untouched and the wild, but that has spawned an industry that exploits these ideals and principles for the sake of commercial interest.

Industry and Exhibitionism

Berntsen's findings include an explanation of why freeriders who got into the sport for fundamentally idealistic reasons agree to become products, models and commercial objects, an explanation I have also been given when inquiring about the reason for participating in organised competition in an activity based on principles of freedom from organisation: the opportunity to ride magnificent mountainsides, gain access to the best snow, and to the biggest mountains (Berntsen 2008:75, Fadnes: interview 18.12.08). But a situation in which the focus has been shifted entirely to performance differs significantly from that in which it remains on the value of the experience. Consider for example a film-production; in this kind of situation there are too many external elements of importance for the experience to retain its original characteristics. Fadnes gives a description of this situation and its influence on his experience that illustrates this. In that setting there is often a huge active apparatus around the riders: helicopters and cameras, safety-personnel and producers. Fadnes then surrenders part of his own judgement, his control, and as a result experiences feelings very different from when there are no cameras and no safety officers making the risk calculations for him.

“In those kinds of situations it is no longer a nature-experience at all. It is an extreme situation, a risk-situation, a situation of pure mastery. The

aspect of me and the mountain, and the joy of feeling like I am in the right place are pretty far gone” (Fadnes: interview 18.12.2008).

By becoming part of the commercial machine of freeriding Fadnes has lost touch with some of the motivational factors of freeriding. Nature-experience and the connection with the elements are no longer central aspects. But at the same time he is fulfilling an exhibitionistic desire to show off his skills, and thereby confirming the significance of another motivational factor. “It is the nitro in the fuel. If the fuel is the joy of being in nature, then the exhibitionism is the nitro” (Ibid.). It seems as though the annexation of riders by the commercial industry has the potential to change their approach to the activity. Or perhaps the riders who do become commercial objects took this approach initially.

The commercial industry is fuelled by the desires of exhibitionistic riders; they want the exposure and sell their abilities in order to get it. In Berntsen’s words “many of the performers bring values and attitudes to the sport that the core once did not associate with” (Berntsen 2008:101). When the driving force changes from being about the natural elements and the individual experience to focusing on exhibitionist elements, the activity’s function as a symbol of freedom from convention is greatly diminished. These riders may still freeride for the enjoyment of it, it is not a black and white distinction, but this is a sign that the underlying ideals are changing and that riders are turning away from the traditional ideals and towards the rules and conventions of commercial forces. The sport is changing in nature, although the actual activity remains more or less the same. This in turn influences the approach to the environment that lays the premises for its practice and may result in a diminished assignation of value to that environment.

Individualisation through Performance

Freeriding is highly individualistic as activity. It is about the fulfilment of individual desires, and within a large part of the community there is greater focus

on the aspect of individual performance than on an experience of nature and the physical interaction with the environment. “It is all about how I can get the most out of nature for my own sake. I do not really experience a holistic way of thinking. There is not much focus on what we do to nature, at least not in my community” (Fadnes: interview 18.12.2009).

Individualisation is symptomatic of contemporary society, where the focus is not on communal aspects but individual ones; individual identity, performance and opportunity. “In a way we can say that youth are more concerned with the ego-trip than the shared journey” (Odden in Storli 2009:55). Telseth calls this individualism a “cultural norm” in contemporary society (Telseth 2005:148). Skogen supports this: “An ideology of individual achievement and responsibility is replacing the belief in collective efforts and solutions” (Skogen 1999:114). This ideology is very much present amongst the individuals in the freeriding community, as inclusion in the community is determined by individual achievement (Christensen 1999, Telseth 2005, Berntsen 2008). This does not mean one necessarily has to be an expert, but that one has to be able to perform on a certain level and most importantly be there out of interest for the actual riding. The insecurity resulting from the intense focus on the individual creates a desire to identify with a group, to be part of a cultural community (Telseth 2005). One is able to identify with others on a basis of one’s individuality, thereby becoming part of a group where individuality is the norm (Ibid.). When this form of identity is then appropriated by the rest of society, the security connected to the sense of belonging to a distinct community is watered down, and the community loses some of its appeal. This is when the culture surrounding the activity as a whole disappears and is replaced by a homogenous mass of assumed identities speckled with smaller groups of enthusiasts who will typically react to the cultural change through the adoption of a differentiating factor.

The importance of distinction from mass trends seems to be a central aspect in the new forms of outdoor recreational activities, and this distinction can be obtained through the exhibition of skills. But in order to achieve this one has

to make sure that these skills are known, and this contributes to the creation of the exhibitionistic element. This in turn promotes the tendency towards the quantification of experiences, since the impression of distinctive skills is easily conveyed and compared with the help of measured data. This is reflected in the devices currently appearing on the global gadget market. Using a GPS-receiver and publishing your experiences online is the primary example. Wearing a SlopeTracker or SkiLog and recording your movements while wearing it are others. There are several options, but the overall tendency seems to be towards an increasing focus on showing off. The whole “I Was Here” mentality, the kind of territorial marking that can be found in various forms in society in general, has developed into something like “I Can Go Everywhere”. The territory has to be expanded, since there are so many available tools that are made and marketed for that purpose. The commercialisation of the activity and the increasingly sophisticated tools for measuring performance is promoting the exhibition of the individual, while facilitating access to vulnerable regions and risky activities.

Technology as Determining Factor

A venture into the wilderness can be an actual search for the wild. But if the key of access is a tool of domestication, is not then the wildness diminished as one moves through it? I believe it is, but I also think that this aspect is individually variable, considering that what one will perceive as wildness depends on one’s position in relation to it. Some will have a greater need for freedom from – and contrast to – society in itself, and thereby also for freedom from navigational aids presenting simplified interpretations of the landscape through which they move. For others it may be enough to be away from the visibly cultivated, and to them these depictions may simply represent a navigational aid that feels safe in an unpredictable environment. It is here relevant to consider Sartre’s theories of existential philosophy – concerning facticity, project and situation – as Odden and Telseth have also done in their

analysis of freeriding as phenomenon, trend and culture (Telseth 2005, Odden 2008).

Facticity can in short be said to be the givens about an individual and his or her surroundings (Odden 2008). It is the sum of physical, psychological, cultural, geographical, and all other aspects of an individual and his or her surroundings. The project is the activity that is being undertaken, and the situation is the meeting between the project, the performer's facticity and the facticity of the surroundings (Ibid.). "Our body, our experiences, our projects and our surroundings are our situation, they mutually create each other" (Ibid:203). And so, people of different facticity will perceive the technology – and the wild – differently because they will be in different situations. Facticity also changes with the implementation of new technology. The emergence of navigational aids like the GPS receiver actually moves the conditions of facticity from demands on skill to demands on economy. Where it was previously one's inherent knowledge and experience of the land that mattered, a lack of knowledge can be compensated for through the acquisition of this technology. One can purchase a kind of information technology that to some extent works as a substitute for knowledge.

Odden operates with two kinds of facticity; inner facticity is that of the individual, outer is that of the surroundings (Ibid.). With regard to culture this can be a part of both, which renders culture an intriguing area of study. It determines how we see the world, but it also determines which world we encounter outside ourselves. Culture is a part of the inner facticity because it plays a role in the shaping of the individual, but it can also be a part of the outer facticity in the sense that it is part of the socio-material structure that is our surroundings (Ibid.).

A socio-material approach to social matters is an approach that emphasises human existence as "a material existence in material surroundings" (Østerberg 1998:27 in Odden 2008:192), in which "the material activity changes the

surroundings” (Ibid.). What we consider to be wild is that which has not been altered by this activity; that which has not been turned socio-material. It can here be argued that the act of mapping in itself is a material activity that changes the surroundings. Considering that “they inscribe boundaries and construct objects that in turn become our realities” (Pickles 2004:145), it is clear that maps contribute greatly to the construction of our reality. And as new technology, with particular emphasis on information technology, “are tokens of a profound and irreversible change in the nature of reality” (Borgmann 1999:220), the power of mapping and map technologies over both our material existence and our material surroundings is significant. Indeed all technology one chooses to include in a project become part of one’s facticity, thereby in part determining the given situation.

Constructing Identity with Equipment

When the structures of industrial society are weakened, the communities that carry meaning – like social class, local sense of belonging, gender roles, professional sense of belonging and family – lose their importance (Odden 2008:236). This means that each individual has to find his or her own community of meaning and, through the association with a community of choice, form an identity. The perspectives presented by Alasdair MacIntyre, in his work *After Virtue – A Study in Moral Theory*, about the fragmentation of morality, support this. His claim is that the language of morality has been lost, and that all we have left are “parts which now lack those contexts from which their significance derived” (MacIntyre 1994:2). And with this loss of morality has come a loss of identity. Due to a fragmentation of value-systems there is no framework within which to construct identity, and we are put in a situation in which ‘anything goes’. There are no guides, no common meaning, and we are all left to determine one for ourselves. Through the search for our own personal meaning we also construct our identity, rendering it a reflection of the found meaning. This meaning will be determined by what kind of milieu we are in, which in turn will

determine our identity, and which means, as Odden suggests, that a change of milieu also will entail a change of identity (Odden 2008).

According to Odden “identity has become a reflexive project and something each individual has to create or reconstruct on his or her own” (Ibid:237). Telseth sees the social belonging as a way of asserting identity; participants see themselves as part of a community with global reach, and this feels like a kind of affirmation of their individual identities (Telseth 2005:148). Fadnes sees the creation of identity as a reason behind the exhibitionistic tendencies in the sport: “There is an exhibitionistic aspect to freeriding that is connected to the creation of identity. People are willing to go quite far in order to acquire the desired identity” (Fadnes: interview 18.12.08). The pushing of personal limits, the limits of the equipment and the limits of nature, and the subsequent exhibition of these acts, is a way in which to obtain a desired identity in the eyes of others. But as the community grows, the feeling of belonging grows weaker. The community loses definition, becomes less distinct, and comes to resemble a mass with which it is more difficult to identify. And, as it becomes increasingly important to assert the identity of choice, exhibitionistic tendencies will become increasingly visible.

Technological Dependency and Class

In an individualistic society we are supposedly free to construct our own identities, “but since different social groups choose to tie their identity to different activities, there is much to indicate that much of the raw material in such a construction of identity is retrieved from class-specific experiences” (Odden 2008:291). Class is a social phenomenon that is very much a factor in the choice and practice of all outdoor recreational activity, and an activity like freeriding in particular. Freeriding requires expensive equipment, travel, and time to acquire a specialised skill. It is dependent on relatively strict conditions of facticity that allows for its conduct. The more conditions of facticity are connected to an activity, the more of them will have to be overcome, and the less

people will partake in that activity (Ibid.). Odden handles issues of a new modernity, of which individualisation and identity as a reflexive project are aspects (Ibid.). These theories point to a freedom to choose, but “an array of empirical studies show that social and cultural background still has a lot of influence on our life-choices” (Ibid:240). With regard to outdoor recreational activity this is in part because it is “a socio-cultural phenomenon that to a great extent is influenced by the surrounding society” (Ibid:246). It is more difficult to take up a sport that no-one in one’s surroundings partake in, and as “the socialising of the various ski-activities have the strongest ties to the upper layers of society” (Ibid:204), members of the lower layers are less likely to partake in freeriding. It is often so that people tend to partake in what goes on around them, and are more likely to be comfortable in these activities than in those which are wholly unfamiliar. The conditions of facticity are more difficult to overcome if they include a lack of knowledge of the existence of the project.

Odden uses the example of mountain climbing as an activity where the conditions of facticity are many. Even though the activity is one of rich traditions and is prominent in the media it will not be accessible to everyone, partly for reason of class. The conditions of facticity are harder to meet for a low income single mother of 40 than for a younger, wealthier, childless man. The facticity of class limits access due to the nature of the project. In that sense the nature of the project freeriding is socially exclusive, and it will never become available to everyone. For that there are too many obstacles that have to be overcome, too many limits that will have to be surpassed.

Continued Gender Relations

Gender is an aspect of the inner facticity that will be of significance in the determination of the situation. Its importance will vary greatly according to the project, and in the context of freeriding it is of some consequence. Due to physical factors like strength, and psychological factors that generally differ between men and women, women tend to perform differently. In competitions

there are separate classes – just like in most other competition sports. The female participants are markedly fewer than the male, and their performance is typically less spectacular to watch. Women are generally seen as weaker, less daring and slower (Berntsen 2008). Freeriding is most rewarding when practiced in the company of people who are on a similar skill-level, and this leads to the exclusion of women in some instances and from some groups. But this is not a matter of gender per se, it is more a matter of skill, and those who do ride well are included and respected. The men want women in the community, but still defend their position in the lead (Ibid:102). Expressions like ‘riding like a girl’ flourish. The men are superior and see themselves as such. What is probably the most ambiguous aspect of the gender situation in freeriding is one that Berntsen points to in her conclusion: “The ski-industry, which until now has been run by men, chooses what outward image the women in the sport are to have” (Ibid:102). This leads to an over-emphasis on feminine sexuality, which in turn leads to a devaluation of the female freerider and a strengthening of the masculine aspects of the sport (Ibid.). The industry is nonetheless adapting to increased female interest for participation in the sport. Female-specific equipment is developed, and the manufacturers are presenting skis, snowboards, boots, bindings and safety equipment like body armour and back protectors especially made for women. This may be seen as a way to increase sales, although things like boots and body armour fit better when adapted to the shape of the female body. Some claim that there is no real difference between men and women with regards to skis and boards. “The factors that matter are height, weight, boot size, and riding style. The rest is just marketing hype” (Venture Snowboards 2009). The clothing manufacturers are finding significant market potential as a result of an increased female participation in the sport. Emphasis is put on the feminine, and the equipment and clothing are made so as to promote this. The traditional gender-relations are continued; female participants stand apart as less spectacular performers but more decorative to look at. In this regard it is important to remember that there is a kind of dress-code in the contemporary freeride community, and that also the male participants tend to wear clothes that

make them stand out. It is also relevant to consider that assertion of femininity is a way in which to fortify the female position in a male dominated sport, and maintain a visible distinction between men and women so the latter do not become invisible among the faster, more daring male performers.

The Extension of Youth

According to Odden's findings 50% of youth rode off-piste at least once in the season of 2004 (Odden 2008). Odden's definition of youth in this research is limited to the ages between 16 and 24. In this context this narrow definition of youth is misleading, as the community according to my experience consists of a much wider age-group. Many of the most active riders are as much as ten years older. Freeriding in the forms conducted independently of ski-resorts have greater appeal among the slightly more mature individuals. This requires longer hikes, and is rewarded with relatively little riding. It seems as though this is an activity most commonly chosen by those with more experience. This may in part be because it demands more of the riders in way of experience and judgement, and is generally of higher consequence.

When defining youth, it is also important to consider the general contemporary tendency to extend the time of youth. This tendency is expressed quite clearly in communities such as the freeriding community. There are many good riders in their early twenties, but there are also a good portion of the more prominent participants who are several years older. The younger riders tend to dominate the terrain parks, while those pushing for the summits and picking the more spectacular descents independently of the facilitated areas tend to be among the more adult. The saying that 'you do not stop playing because you get old, but get old because you stop playing' is a statement that suits this part of the community quite well. It is almost as if we, as long as we keep playing, are not adult and do not have to conform to the conventions of the adult world. Freeriding in its original form is an activity that symbolises freedom from convention and conformity, and the activity serves the purpose of keeping these

aspects of the adult world at bay. Odden's suggestion that today's youth use the new forms of outdoor recreational activity in the construction of a self-chosen identity also supports this tendency of young adults. "Through leisure activities the individual can tell the story of him- or herself" (Ibid:136). By continuing to play and to challenge yourself within the activities that are typically those of youth you postpone the shift towards an adult identity, at least in your own eyes. Technological developments support this attitude and assist the 'forever young' in their quest. It is possible to spend less time on the activity overall, as technological facilitators ease the demands for preparation and maintenance of skills, rendering it easier to combine with work and family. They can play harder for longer, and the commercial forces of the equipment industry duly exploit this. Is the fact that many of the more profiled riders are in their late twenties or early thirties a symptom of an increasing desire amongst young adults to remain outside of the clutches of mainstream society? Are their reasons for pursuing the activity linked to an inherent opposition against a controlled and organised society? Freeriding is not just a way of turning away from organised sports, but from the conventions of society in general. In a sport like freeriding you are allowed to stand apart, show individuality and trust in yourself and your abilities. You choose your own line and make all the decisions independently. At the same time you become part of a community in which individuality is the norm, and where you are accepted on the basis of those decisions.

Appropriating Tools of Conformity

Freeriding is individualistic and a way in which to construct an identity. It is characterised by a form of opposition, and ideals related to freedom from conventions and the organising tendencies of general society. Maps are made and distributed by commercial actors, governments and social institutions and are therefore expressions of the conventions and conformities that freeriding can be an escape from. At the same time maps are attempts at reproductions of the real and they are commercial objects as well as expressions of interests. Consider that

“[c]artographic institutions and practices have coded, decoded and recoded planetary, national and social spaces” (Pickles 2004:5). New technologies cannot completely eliminate cartographic bias or misrepresentations, and the maps presented to us in digital form are still generalisations and simplifications of the real. That renders them social expressions of a perceived landscape, but at the same time “they inscribe boundaries and construct objects that in turn become our realities” (Ibid:145). The fact that these technologies are used to facilitate a pursuit of freedom from convention through activities such as freeriding renders them tools of liberation from the power of social conformity as well. Where the anarchist James Scott in his work *Seeing Like A State* sees maps and mapping as methods of state control (Scott 1998), the freerider sees them as a key to freedom from control of access and movement. Fadnes warmly welcomes any geographical tool that succeeds in giving him a closer view of the nature in which he prefers to play (Fadnes: interview 18.12.2008). Through the use of these technologies he and other freeriders are granted increased freedom of movement and are able to venture away from the areas, like ski-resorts and marked trails, in which expressions of control are visibly present. The new map technologies can be used actively as an aid in the turning away from mainstream society. The oppositional young adults turn towards technology and implement it in their attempt to turn away from societal control, using technology created in part to uphold the boundaries (or conventions) of that society to break down those boundaries. Mapping and measuring are ways of organising, structuring and classifying a society through the organisation and classification of the land, and this process represents in part what the young adults are turning away from; a process, in which everything is named, ordered, reasoned and analysed, where nothing is left in mystery or unclear. The freedom of the indefinite has become a scarcity in an individualised society in which everything is defined. And in the search of that freedom some choose to employ tools that are part of the cause of that scarcity.

4. Approaching the Wild

How one chooses to approach the wild is determined by the way one perceives it, and, as I have discussed, this perception is determined by the information one has access to and ultimately the knowledge one has developed as a result. What remains wild in our perceptions is that which to us remains unknown, and “to venture into the unknown is not everybody’s wish” (Fadnes: interview 18.12.08). Facilitated access – in the form of extensions of our ability to find our way or in that of physical extensions that improve our ability to negotiate the landscape we encounter along that way – is one manner in which to eliminate the unknowns, and consequently the wild. This elimination is a natural part of our interaction with nature, a result of our movement through it. But it is important to realise that the process of elimination has value in itself, and that technology made to reveal the secrets of the landscape may actually have a detrimental effect on the experience as a whole. Part of the reason for seeking the wild is to experience it firsthand, and too much technological interference may alter one’s perceptions to such an extent that the chance to do this disappears.

In this chapter I will discuss wilderness and the concept of wildness, and then move on to issues related to our access to those parts of nature we perceive to be wild. I will continue with a clarification of the impact of technological facilitation of access, on the wild and on our perception of it. Following this is an examination of the significance of the untouched in the freeride context, and how this influences the riders and their activities.

Nature as Guide

“For nature to be a guide, it must be the carrot at the end of the stick – always tasty, always out of reach” (Rothenberg 1993:56). But Rothenberg’s carrot has become increasingly easy to reach, and is already being eaten by an increasing number of people. Technology is making more and more parts of the natural world available to an increasing amount of people, both directly by way

of facilitated access and indirectly by making it more surveyable. It is continuously altering the width of our reach – and according to Rothenberg's statement that then entails the loss of nature as a guide. Technological facilitation and an industrial approach to the environment are causing a loss of connection with nature, and subsequently our respect for it. And this development is altering the balance between humanity and nature. This facilitation, the creation of tools and aids that make us capable of doing more and performing better with less direct knowledge and less understanding of the environment, could it also help bring awareness of the loss of the guide that nature can be? Could the opportunity to touch everything, be everywhere, possess intricate knowledge as a result of advanced analysis of endless amounts of information help us to understand that guide more accurately? Fadnes nurtures hope of this. "Perhaps we become more conscious. When nature is made more visible through technology, so are the problems, the difficulties and the challenges" (Fadnes: interview 18.12.08). Perhaps a 3D visualisation of your favourite mountain will awaken a desire to protect it, not just to want to ski the most difficult line. Or perhaps it will result in further commodification of the remnants of the wild, by contributing to a view of nature as a stage upon which we are free to perform as we see fit. Certain kinds of map- and navigational technology can act as barriers between the individual and his or her perception of nature. But at the same time technology is what enables the rise and continued practice of new outdoor recreational activities. Equipment technology has contributed to the increased popularity of freeriding, and has together with digital map technologies granted increased access to what we who live outside of nature, in the world we have constructed through the adaptation of that nature, call the wilderness.

Wilderness and Wildness

"The concept of wilderness as the untouched or untamed land is mostly an urban perception, the view of a people who are far removed from the natural environment they depend on for raw resources" (Gómez-Pompa and Kaus in

Callicott and Nelson 1998:297). As we have to a great extent succeeded in taming and organising those parts of the world where the majority of people reside, that which remains on the outside of those confines is commonly perceived to be wild, unpredictable and uncontrollable. Those who live outside of the wilderness, and therefore perceive it as such, often see it as an adversary, “an unruly force that can be harnessed to human purpose only through science and technology” (Oelschlaeger 1991:288), or as a challenge, “a frontier to be tamed and managed” (Gómez-Pompa and Kaus in Callicott and Nelson 1998:296). By harnessing, taming and managing the wilderness we render it a subject of the human empire, a commodity with which we can deal as we please. “The world changes as we learn to see it in new ways. And the way we see the world depends on how we use it” (Rothenberg 1993:xii).

In the debate around wilderness, its existence and its purpose it is important to distinguish between *wilderness* and *wildness*. Wilderness may in the most basic sense be seen as the environments we have not cultivated and remade according to our own fashion. Neil Evernden, associate professor of environmental studies, clarifies the distinction between this and the concept of wildness in his work *The Social Creation of Nature*: “For wilderness can be regarded as a thing, and as such, susceptible to identification and management. Wildness, however, lies beyond the objects in question, a quality which directly confronts and confounds our designs” (Evernden 1992:121). Wildness can be defined as that which we cannot control, which we have no power over or definite bond to, that which represents the otherness, or mystery. This otherness is the reason why wilderness, as the harbour of wildness, is viewed as adversary or challenge. Because it represents that which ‘confronts and confounds our designs’ we enter into a state of opposition. This in turn leads to a tendency of attempting to conquer it.

Due in part to our tendency towards conquering that which confronts us, we have managed to make our mark on almost the entire planet. “There is no place left anywhere on the face of the earth that is completely free of human

agency” (Keeling 2008:506). Even though an area may be far from human habitation and cultivation and without any visible signs of human interference, it is nonetheless affected in some way by our activities elsewhere. “When we speak of protecting undisturbed habitat or wilderness, then, it is important to clarify that the word *undisturbed* refers to the absence of modern technologies” (Gómez-Pompa and Kaus in Callicott and Nelson 1998:300-1). But the areas perceived to be wild, which are also accessible to tourists, are of great and increasing commercial interest. This interest is evident in the number of tour operators who promote this kind of tourism. A Google search for ‘wilderness adventure tours’ yields 2 900 000 hits. But these wilderness tours and adventures are more often than not about what can be conceived of as wild places and wild experiences rather than about actual, defined wilderness.

Definitions and Perceptions

The Norwegian government has measured how much of the Norwegian landscape can still be seen as wild, defining wilderness as an area more than five kilometres away from any kind of infrastructure. This includes roads exceeding the length of 50 metres, power lines, channels, pipelines, water reservoirs and other alterations connected to hydropower dams. According to the estimates of The Directorate for Nature Management (Direktoratet for Naturforvaltning) there was in 2003 only 11.7% left of the Norwegian wilderness³. This is down from 48% in the year 1900 (Direktoratet for Naturforvaltning 2009). This entails that little of what we perhaps think of as wilderness actually have the qualities required to be classified as such. Much of the area used for traditional recreational activities is in fact cultivated through forestry, farming, cabins, access roads, manipulated hiking trails etc. But this in itself does not necessarily deteriorate the experiences of those seeking the area in search of the quality of wildness, as it is the perception of wildness that is of importance. Although a matter of personal emphasis, preference and awareness, the presence of visible

³ New estimate is underway and will according to www.dirnat.no be published in June 2009.

human influence is not synonymous with a ruined wilderness-experience. It seems as though many prefer their experiences to be – to some extent or other – of manipulated nature, as they repeatedly travel to the most popular, and most facilitated, areas. Herein lay matters of safety and comfort; a perception of non-manipulated nature as the unknown and wild, threatening and unpredictable, the harbinger of fear. Many of us tend to seek the easy way to interact with nature, the safe way demanding the least planning, thinking and effort. And this approach is fuelling a growing industry. The perceived need for facilitation of the wilderness and the commercialisation of wild experiences is depriving us of its wildness. A part of this is happening through the implementation of sophisticated tools of navigation, as they alter our approach to the wild and render it an accessible object of desire rather than an intangible concept of contrast.

Free nature, where there are no visual traces of human endeavours and where we are still free to roam, explore and challenge our own nature independently of our own constructions, is rapidly becoming a scarcity. And this increasingly scarce resource is in demand. Armed with their equipment of choice people venture into the wild, in search of something that is not to be found within the confines of civilised society. “Human life takes place outside nature, and the boundaries between wilderness and civilization are definite” (Oelschlaeger 1991:287). To approach the wild can therefore be seen as an attempt to live part of one’s life *inside* nature. In the choice of equipment by those who approach the wild lies the determinant of how the encounter with wildness will be experienced. If part of that equipment consists of technologically quantified representations of reality where uncultivated nature is reduced through simplification and analysis, then the experience of this wildness will be altered. One will then be in a situation where a cultural interpretation precedes observation, rendering the experience determined in part by that interpretation.

Protection and Elimination

An article on the idea of wilderness in the journal *Environmental Values* by Paul M. Keeling simplifies the concept of wilderness protection, rendering it a matter of the value of wildness. “To protect wilderness is to allow the widest possible autonomy to nature; a place where otherness – wildness – has its highest and fullest expression” (Keeling 2008:516). This otherness and the autonomy of nature is also a matter of concern to Evernden. “Every question we ask, every solution we devise, bespeaks mastery, never mystery: they are incompatible. Yet wildness, otherness, *is* mystery incarnate” (Evernden 1992:121). It is the uncontrollable, the unknown, that which we as yet have been unable to organise and classify. Map technologies are developed for the purpose of elimination of the unknowns of landscape. By organising and simplifying the wilderness we are turning it into something that can be managed. Through management we are then eliminating the wilderness; turning it into something that can be exploited, marketed and sold.

By eliminating the wilderness we are closer to gaining control of the wild, of wildness itself. And so we are making it our own; establishing human ownership over nature’s wildness and thereby altering nature. “An entity with the quality of wildness is its own, and no other’s. When domestication begins, wildness ends” (Ibid:120). And so the appropriation of the wilderness necessarily entails the elimination of the wild. In our scramble to know the wild, to make it familiar, part of our realm, we succeed in nothing but its destruction. Mapping plays a central part in this process. The core of mapping is the familiarisation of the unfamiliar, and through this act we alter our perception of the landscape. We actually completely change the nature of that landscape for all human purpose. Familiarity dispels fear, but at the same time it can lead to a feeling of complacency and a tendency to take things for granted.

Past cartographic practice with regard to the mapping of unexplored areas was first to decorate these unknowns with fantastic objects and animals, and then

to leave them as white, empty spaces. As they were gradually conquered in one way or other, these white spaces – either seen as empty, waiting to be filled in by man, or as filled with mystery and a source of fear – shrunk in size and then disappeared altogether. An early advocate for the preservation of the disappearing wilderness was the American ecologist Aldo Leopold (1887 – 1948). According to one of his contributions to the wilderness debate the main reason for the appropriation of these spaces is that “one of the principal criteria of civilization has been the ability to conquer the wilderness and convert it to economic use” (Leopold in Callicott and Nelson 1998:75). Leopold argued for the protection of wilderness partially on the grounds that it can “if rightly used, yield certain social values” (Ibid:76). He was concerned with the authenticity of the wilderness experience and its value as human experience. His apprehension was with the facilitation of the experience and he criticised the development of certain forms of recreational activity. He used the European way of hunting as an example, referring to it as a form of picnic, suggesting it had lost the element of outdoor survival and living (Ibid). And if the only challenge is the killing, which is basically a matter of aim, is then not also the reward of lesser value? With facilitated access, facilitated approach and a general tendency towards appropriation of that to which we gain access, the experience and our perception of the environment in which it takes place changes. With facilitation, or domestication, wildness is eliminated, and the initial reasons for which to approach it disappear. Unlimited access to a commodity renders it commercially worthless, and so any industrial exploitation will have to create a perceived need for tools facilitating access and interaction with that commodity. And so the human frailty in our meeting with that which we have not constructed is emphasised, and a perceived need for better technological compensations for this is established. “When we take what we have made for granted, the constructed environment stares right back, reminding us that we know only what we have put there and see what we want to find” (Rothenberg 1993:34).

As land was being mapped for the first time, the change in how it was perceived was momentous. From being seen as unknown, and due to lack of

knowledge treated as a feared adversary, uncultivated landscape came to be seen as a seemingly infinite resource. Pickles uses the example of the mapping of the American wilderness: “The mapping of these spaces commodified them and the natural resources they contained; it “created” space as an exploitable resource” (Pickles 1995:118). The manipulative potential harboured within contemporary map technology renders this process of the creation of space through mapping a much less rigid process which enables the repeated re-creation of that same space. Through the implementation of GIS, wilderness is rendered another object to be analysed and managed. And the purpose of that analysis is more often than not to discover utilitarian value. We are replacing mystery with quantified utility, thereby eliminating the wild and replacing it with resource. Considering the opportunities provided by contemporary map technology for the individual manipulation of maps, it seems likely that the commodification of landscape now also takes place on an individual level. Landscapes are analysed, judged and rated in a search for their value as scenes for our performance of pastimes. A freerider will be looking for the opportunities offered by the landscape, attempting to find a way to handle its wildness that will result in a fulfilment of the underlying motivations for interacting with it. Through the industrialisation of the sport and the subsequent alteration of underlying motivations, this search for opportunity is commercialised. Websites, software, technological devices and information are marketed and sold claiming to reveal and create opportunities for a better interaction with wild nature; to enhance performance. These things are marketed with wilderness as a stupendous backdrop, basically expressing that it is possible to access it, experience it, and perform one’s best with the purchase of said gadget. Access to the wild is sold in the form of equipment, rendering the wild itself an object of purchase. In the words of writer and philosopher Sigmund Kvaløy Setreng:

“To the same extent as a person seeks nature experience as primary intrinsic value – seeks to fill the hours in the mountains, the woods, and by the sea with the utmost conscious interaction between nature and “inner capacities” – to the same extent is this person rendered a bad economic

investment. – And opposite: To the same extent as our natural spaces are filled with people who have lost the capacity for lingering experience – who have been completely caught by the means-oriented life-form of modern western culture – to the same extent can the country's nature be sold" (Kvaløy 1968:29).

The concept of wildness is in many forms used to promote goods and services; as an abstract sensation attracting the attention of people living in a tame and controlled reality. It has value in a cultural context as that which opposes culture, as the opposite of that which we have created for ourselves. Wildness is the product of something that seems to us external, and mastering it is therefore seen as courageous and significant. This is another expression of a culture promoting mastery of environment, a culture formed as a result of our inability to see our environment independently of cultural context. "The human animal (...) interposes culture between itself and environment, which is to say that Homo Sapiens is a culture-dwelling animal" (Oelschlaeger 1991:284). The wilderness is a product of culture rather than actual, untouched nature because we reside in our cultural context rather than in our actual environment. That which we see around us is shaped by culture, and so is how we see it. We have transformed natural uncultivated land into a symbol of that which is not influenced by human endeavours, a physical and psychological wilderness embodying that which we do not know. And as we long for change, variation and adventure we seek it out as something that is opposite to us.

The Effects of Facilitation

One of the contributors to the anthology *The Great New Wilderness Debate* from 1998, the American philosopher and author Jack Turner, criticises our appropriation of wilderness for recreational purposes. He blames facilitation in nearly all forms for the disappearance of the wild; from the construction of trail systems to "maps, guidebooks, guiding services, advertising, photography books, [and] instructional films" (Turner in Callicott and Nelson 1998:620).

Turner claims that these aids and commercial products contribute to the elimination of elements central to the wilderness experience, things like “discovery and surprise and independence and the unknown, the very qualities that make a place wild” (Ibid:620), and the very qualities that make an experience wild. By being provided with information in excess prior to departure, the trip itself loses some aspect of its meaning, and the purpose for which to pursue the experience is altered. The qualitative motives behind the pursuit are quantified. The resulting approach is one promoting management, control and predictability, one that according to Turner turns wilderness into a relic and subsequently “converts places into commodities” (Ibid:621). The remaining wild nature is turned into a sight to see, somewhere you can stop and look and then tick off your list of things to be seen. We are left with a hollow wilderness scene, there only for our enjoyment as performers or as spectators. Turner writes from an American perspective, a perspective influenced by the rapid disappearance of the American wilderness. The situation is different in Norway; the wilderness is different and the outdoor traditions are different. Where American tourists pay their way into the wilderness parks in order to explore the commodity they have just purchased, the Norwegian adventurers purchase the equipment they are told will enhance their experience and increase their personal safety in their encounter with the wild. They head for the summit, cocooned in their technological facilitators, brandishing unlimited access to external information about where they have been, where they are and wherever they would happen to be going.

It is perhaps helpful in this context to compare a venture into the wild with a venture into the world, and draw a parallel to global backpacking. In my experience there are two kinds of backpackers: those travelling with and without a Lonely Planet book. Lonely Planet books are guide books with particular focus on backpacking, which contain almost every kind of information about a featured place. To travel with it is safe, easy, convenient and comfortable; you can easily find all necessary information concerning hotels, food, excursions and potentially perilous situations. To travel without means that you get to explore places unknown to you on your own, perhaps having to endure a little more walking,

but what you find will be the fruits of your own exploration. In the course of my travels I have met many who seemed to be on a kind of geographical treasure hunt; a sightseeing spree resembling Geocaching, the GPS-based treasure hunt. They would hurry from place to place, covering a continent in a month and picking destinations from the guidebook's list of recommendations. It seems as though many travellers have as a goal to tick off as many places and sights as they can in their few months on the road, and in this hunt for the spectacular, the famous and the other, a Lonely Planet book is a great tool. We have limited time, and we are told this by all kinds of different media, advertising and literature. Who has the time to explore on their own when there is so much to do, to see and to be? So instead of heading off on adventure we opt for the bite-size version. We can get to see it all, even on a tight schedule, but we only get a glimpse of the surface and never get to know it for ourselves. A GPS receiver and WMS services are in a sense the Lonely Planet guides to the wilderness, sources of information with the purpose of facilitating experience. The question remains what this facilitation actually does to the value of the experience and to our perception of the places we visit. Everywhere has been explored by someone, but by following in their footsteps and following their directions we are depriving ourselves of the explorative element of adventure. In fact we are diminishing the adventure itself, rendering it a commodity and becoming contributors to the commercial adventure industry.

The Effects of Access

One of the main supporting factors of the Norwegian tradition of outdoor recreation is what in Norway is known as *Allemannsretten*. The word translates directly as something like 'every man's right' and refers to the right to move freely in the natural landscape as long as one does not cause inconvenience to others (Direktoratet for Naturforvaltning 2008). This right was incorporated into the law on outdoor recreation, '*Friluftslivsloven*' of 1957, and is unique to Norway (Ibid.). The Norwegian tradition of outdoor recreation, of which skiing

has always been a central part, got its judicial legitimacy through the certified right to free movement in the natural landscape. It was after 1957 officially lawful to trample across the landscape of your choice, as long as you were of no inconvenience to others. Whatever impact this activity had on the landscape in question seemed irrelevant, and it sometimes seems as though it still is. As long as the damage has happened as a result of recreation its consequences are regrettable at most. Recreation is seen as beneficial to the individual, rendering his or her life more pleasant, which makes it hard to argue against this view. It is less problematic to protest against the construction of a dam than against the hoards chasing the illusion of untouched nature or pristine snowfields. But the conquering of wildness, and thereby the domestication of the actual wilderness, has the same implications whether the cause is the quest for hydropower or for spectacular views. The focus needs to be primarily on what is being affected, not on which part of the human enterprise is affecting it.

Another aspect of *Allemannsretten* is the subsequent myth-like belief that everybody has access to everywhere. Nothing is off-limits and everybody is included. The virtue of sharing is embodied in the pronounced right, as it in a way states that everything is there for everybody; we all have the same level of access to the same landscape, and are equal in this respect. This is of course to some extent a fallacy; it is impossible to grant everybody access to everywhere, many will for some reason or other be unable to get there without extensive facilitation and assistance. So how far should the facilitation of access to the wildness of nature go? Should everywhere be accessible by car? By wheelchair? Does one draw the line at steps and rails on the most popular hiking trails? Within the non-physical form of facilitation we can pose the same kind of question. Should for example all terrain be available in a digital 3D format, or should the mystery of the landscape be unlocked by the individual observer? As Eriksen answered to my question of what he thought about having the opportunity to view 3D simulations of his favourite mountains: “What is the point in going there if you can see it all from your apartment in the city?” (Eriksen: interview 09.02.09). Although these questions concern vastly different

aspects of the consumption of natural landscape they are nonetheless related. They are about an approach to nature that has grown out of a vision of the world as commodity, and that is furthermore a result of the general hunt for speed and comfort.

Some people speak of the destruction of national parks and other popular places of outdoor recreation. Others complain about the lack of solitude, and claim that their favourite pastimes have been devaluated because of crowding. And as soon as somebody utters a wish of having their neck of the woods to themselves on a Sunday afternoon they are labelled somewhat antisocial and certainly quite egotistical. But at the same time an increasing amount of people seem to think there are too many to share with, and not enough to go around. If part of what you seek is the majestic solitude of spectacular nature, then the presence of tracks, people or even just the traces of recent visitors have the potential to deteriorate the experience. “Can too many people spoil the spectacular?” (Rothenberg 2002:131). If the qualities making a place spectacular are connected to the absence of other people and their tracks, this is most certainly the case. As for freeriding, an activity that is ideally performed on pristine snowfields, it seems likely that too many people, too facilitated access, may indeed result in the ruin of the spectacular. During our interview Fadnes expressed an ambivalent attitude towards the presence of other groups of people during his freeride adventures. In one way he sees it as a chance to show off and exhibit himself and his skills. But he also gets annoyed and stressed, fearing that the others will ride his line before he reaches the top (Fadnes: interview 18.12.08). His perception of the environment and the situation he is in is to some extent determined by the presence of other people. Their presence gives the experience value as an exhibitionistic endeavour while diminishing its value as nature-experience. This asserts the view of nature as a stage and renders freeriding closer to a matter of mere performance.

If changes in map-technology can increase accessibility and decrease the risk connected to the individual exploration of the Norwegian mountain ranges,

then we can – in theory – each have our own summit all to ourselves. That would mean less wear and tear on certain areas and a more even distribution of environmental disturbance. It would also mean that many more areas would be affected. In their critique of the new recreational activities, sceptics towards the changing nature of outdoor recreation most commonly argue about the disturbance of wildlife. An example of this is the discussion about kiting at Hardangervidda. This discussion revolves around whether it should be permitted to use kites and skis/snowboards in the area, as this activity could potentially have negative impact on the population of wildlife in general and of wild reindeer in particular. This issue has periodically received some attention in mainstream media. The result of the discussion was a ban on kiting in organised forms, such as competitions and organised practice, but not on recreational kiting in the area. Prior to this decision, the University at Ås (UMB) wanted to conduct a study on the effects of kiting on the population of wild reindeer, but were prevented by authorities under the pretext that the study itself would disturb the animals (NRK 2006). Kiting remained legal, and the consequences remain unknown.

In the discussion about the effects of increased use of wilderness for the purpose of adventure sports, those arguing against this use are often met with requests for research and findings proving the detrimental effect. The damage done by bulldozers and other industrial machines is immediately visible, while the displacement and eventual disappearance of a small animal or plant due to increased traffic hardly motivates care and reflection. Some find it hard to imagine what kind of harm skiers on a mountain face can exert, compared to massive machinery digging holes on the other side of the hill. What is the impact of small clusters of adventurous skiers when much of the Norwegian uncultivated regions are already accessible by industrial roads? It becomes a question of necessity, priorities and preferences - the necessity of industrial expansion in order to ensure economic growth, and the choice to prioritise this over the preservation of wilderness, for reasons of preference of economic growth over natural capital. On the other hand it is also a matter of approach and attitude.

Faarlund states that the contemporary outdoor activities abuse nature as an arena and “sparring partner” (Faarlund 2009:35), signalling the significance of attitude in the interaction with wild nature. The adopted attitude of the participants will determine what kind of impact the activity has, reinforcing the importance of maintaining a perspective on nature as something more than a thing to be conquered or a stage on which we perform. Through improved equipment, increased safety through the introduction of risk-reducing technology like avalanche beacons, and the increased availability of information resources, more people are gaining the ability and opportunity to participate in the relevant activities. This significantly changes the environmental impact of the activities, and results in potentially serious environmental issues. Due to the relatively recent introduction of freeriding on a commercial scale, and the fleeting nature of such recreational trends, it is quite difficult to monitor their impact.

Access and Consumption

Freeriding in remote areas generally requires strenuous hiking in order to get to the top. And while some see this as a part of the journey others will view it as a necessary evil (Fadnes: interview 18.12.08, Odden and Bischoff 2002).

Access facilitates consumption, and increasingly facilitated access also contributes to the withering of traditional ideals. This is because facilitated access often will represent a change in approach and subsequently in perspective on wild nature. Heavily facilitated access will reduce the wildness of that which we gain access to, and as availability is increased the value of the area as commodity increases. Commercialised access to wilderness is the most prominent cause of the commodification of nature.

“Something that I do may, if seen in isolation, be bearable for nature, but if everybody else did the same it would undoubtedly not be so” (Dahle 1991:163). The concern with disappearing wildness, wilderness, solitude and the untouched extends far back in history. Each generation worries about human development and strategies of civilisation. Looking at the yearbooks of The

Norwegian Trekking Association one finds article upon article about how mountains and national parks no longer are what they used to be. People are concerned with the power-lines, the pipelines, the dams, the missing waterfalls. But also with the roads, the paths, the hikers' highways that wind their way up to the most popular peaks, the ski resorts with their lifts and clean shaven slopes. Editor and author Ragnar Frislid commented on this almost two decades ago. "The mountain has become more available than ever before" (Frislid 1991:14). Or as Erik Solheim, now minister of environment and development aid, wrote about the exploitation of the mountainous regions of Norway: "It does not matter what it is about, it is always accompanied by roads" (Solheim 1991:87). These roads accompany industry of all kinds: mining, power, forestry, agriculture and tourism. Modes of transport are made available to bring people into wild nature and, while access is improved, that which we gain access to is changed – and in certain respects diminished. Through the actual facilitation of access we are diminishing wildness, and thereby a central aspect of the contrast we seek.

The goal for mountain tourism has for a while been easy, quick access for as many people as possible. From a management perspective remote regions, which are more difficult to access due to their degree of wildness, are of less value than more easily accessible regions (Faarlund 1973). The attitudes behind the decisions to facilitate mass tourism in ecologically vulnerable regions are of the same nature as those promoting and facilitating freeriding on a commercial scale. These industries, both forces behind the commercialisation of outdoor recreational activities, are about the consumption of natural wildness for the sake of economical gain. And in order to achieve sufficient gain it is often necessary to alter certain aspects of that nature. Frislid was concerned with this when the new forms of outdoor recreation had not yet gained significant popularity: "One no longer lets oneself be distracted by nature. Where it does not provide the right conditions, we adapt nature to our needs" (Frislid 1991:14). The most visible examples of this are the expansion of ski-resorts, the building of large, public cabins intended to support mass tourism, walkways, stairs and manipulated trails. Nature itself is no longer a hindrance of traffic, as it can be altered to suit our

needs. Temporary facilitators like snow-scooters, snowmobiles and helicopters make way for those without a wish to spend time ascending the mountain of choice. Navigational aids that facilitate planning and execution of the activity take care of eventual uncertainty about the terrain and landscape. We need not concern ourselves with the nature we are in while we are in it, because our tools and our facilitations take care of most difficult or perilous, challenging – or exciting – situations.

The extensive preparation of roads, cabins, ski-lifts and other infrastructure changes the landscape, but what are the consequences of the extensive facilitation of our perception of that landscape? And what happens when accessibility goes digital, satellite based and interactive? It entails a general facilitation of nature where the importance of individual perspective is greatly diminished, and where the collective such is sovereign. The individual's geographical position is determined not through a combined application of personal and collective knowledge, as is the case when using paper-maps, compass and one's own calculations. One can instead, by carrying around a technological device, be informed of it by a system of satellites. Tools like GIS, GPS receivers and WMS allows us to 'see over the hill' and at the same time be informed of how others experienced that hill. Our perspective on the landscape, and on our position in it, is formed as a result of external input; the manipulation of wild nature is happening in our perception as well as in the landscape. It is a different kind of manipulation, and it does not entail the instant destruction or alteration of landscape, but it nonetheless has the potential to alter both our experience of nature and nature itself.

Secrets and Snow

"That picture is taken in 1992. That was the last time I saw any wild reindeer up here at all", Eriksen told me and pointed to a picture showing a flock of reindeer on a mountaintop (Eriksen: interview 09.02.09). He thinks the decrease in the wild populations of reindeer has been caused by the massive

increase in human activity. If we take a look at the available statistics for Hemsedal ski-resort it shows an increase in turnover from 37,2 to 104,5 million Norwegian kroner between the seasons of 1991/92 and 2007/08 (Alpinanleggene 2009). Eriksen is concerned about his backyard, the mountains he has been exploring for the better part of two decades. He hopes the increasing use of GPS receivers and WMS services will lead people to look elsewhere for the perfect powder turn, because the areas close to the ski-lifts are getting too crowded (Eriksen: interview 09.02.09). But he does not really see the need to use these tools himself. “If you can find out everything about where you want to go, then what’s the point in going there?” (Ibid.). Eriksen is concerned about the practice of publishing directions and revealing what used to be secrets, learned through years of practice and exploration, online. His philosophy of freeriding is one where skills and mastery is at the centre. You have to earn your place, through the development of knowledge and skill, and the publication of that kind of information is a kind of shortcut that is not conducive to the development of the sport, the culture or the environment. It can also lead people into areas and situations they cannot handle. After all, they have merely dug up the information on the internet, and may lack the knowledge of those who put it there. To him this kind of publication of information is completely different from the distribution of pictures and films: “It is ok to make videos and take pictures and publish them, sharing your experiences that way is a way of making the sport progress and develop, but there is no need to reveal where those shots were taken” (Ibid.).

Eriksen was part of the group of snowboarders in Hemsedal that were the object of Christensen’s study. This group was concerned with the consumption of powder snow; when it was there everybody wanted to ride it and they had to make sure they were there first. This concern was particularly expressed through elaborate secrecy around the group’s favourite places to ride (Christensen 2001). When Christensen expressed wishes to publish maps showing these places and how to get there he was met with protests (Ibid.). And when members of the group met skiers who asked for directions to these places they were met with

silence (Ibid.). The group protected their knowledge and expertise well in an attempt to keep their playground to themselves. My encounter with Eriksen, ten years after Christensen's study, clearly showed me that they still do. The secrecy has in some ways become even more elaborate, as the places they used to have to themselves now are publicly known. There is more competition over the best runs. Places which used to lie untracked for days after a snowfall are now used up while the snow is still falling. Eriksen and his small, tight-knit group of snowboarders have had to find new spots, some requiring greater effort for access, others greater risk. And they intend to keep this knowledge secret. When I asked Eriksen where he had been riding that day he gave me a vague description that would not enable me to find it unless I was quite familiar with the area. Eriksen has been riding these mountains for a long time, and knows much that will not be found in a guidebook. Partly for the reason that he will never tell.

“It can be compared to fishing spots. If you have been fishing in a river for several years, you know all the best spots. If some young fellow comes along and asks you where it bites, you would never give up the best spot just like that. You might lead him to one of the lesser ones, and chances are he will be happy with that, oblivious to the fact that there are much better ones close by” (Eriksen: interview 09.02.09).

But not all freeriders are secretive about their experiences of the places they discover. Some have a completely different approach to the scarcity of powder snow. These are the ones who publish their experience in one way or another, sharing it in forums, on Google Earth or elsewhere. They incorporate their experiences into the industry that has mushroomed by feeding on the appeal of spectacular landscapes in combination with the apparent mastery of nature and self. Through this act they also make it less likely that they will have the same kind of experience there again; through the distribution of information and thereby the facilitation of access they are altering that piece of landscape, rendering it a more accessible and less mysterious part of the human playground.

This practice of sharing experiential information, of which the publication of GPS waypoints and directions are a significant part, may be said to reduce the experience of nature to a chase for status, for attention, and for exposure. It becomes a part of the industry of information, and the experience *of* nature is reduced to a commercially quantified experience *in* nature.

Powder Snow

Powder snow is the ultimate kind of snow in which to freeride. It is what is sought after, what is shown in pictures and films, and what is generally seen as the perfect element. It is soft and fluffy and the way it parts around your body as you seemingly float through it is the feeling most freeriders look for when they set out on a hike. On the days when it lies deep the riders line up in front of the lifts, chasing each other to get to the top, to be the first, to lay the first track. Some subscribe to powder alarms, services that send messages to your mobile phone telling you when and where there is a chance of doing just that. The simplest way of looking at this incessant hunt for the untouched, and the one most freeriders would probably state as paramount, is the fact that skiing in powder is relatively rare, and that only one skier or snowboarder can ski or ride each 'line' before it has been 'used up', tracked or – drawing a parallel to the general nature of goods – consumed. "There is a strong desire tied to the consumption of powder-snow. Powder is limited goods; partly because the snow changes, partly because the most attractive areas are tracked and thereby used up." (Christensen 2001:118). Powder becomes a commodity in the eyes of a freerider, something that is willingly paid for in the form of lift-passes or hours of hiking towards a snow-covered peak.

Pristine powder and biting fish are both strictly limited resources, and on some level it is understandable that those who truly appreciate their occurrence want to keep them secret. After all there is not enough to go around. There is not enough fish in the river, and there are not enough untouched, ski-able mountains that are considered easily accessible. External forces – the media and the commercial actors in particular, but also state and local government – are trying

to tempt people out of their comfort zones and up to the resorts and the mountains, often with advertisements showing a lone rider turning his way down an untouched mountain in a spray of powder-snow. This focus on powder on behalf of the commercial actors contributes to its commodification. The sport has been commercialised and its main prerequisite commodified: a mountainous landscape covered in pristine snow. In reality, the rider featured in the ad was either the first one pushing his or her way through the turn-styles on the morning after a massive snowfall, or the shots were taken somewhere far away from the access of the lifts. On a good snow-day in Hemsedal last season one of the taxi-drivers bringing the riders back to the lifts from a well known, lift-accessible, freeride area called *Gummiskogen* (The Rubber Forest), described the situation at the bottom of the run as “the 17th of May on Karl Johan”. The brightly clad hoards awaiting the taxis keep increasing in size, ensuring the daytime business of the three local taxi companies. The majority of the riders flock to the same places, making these places seem like anthills, crawling with enthusiasts on the good powder days. Only when the lifts close and they all head home to their cabins and hotels, the mountain is left alone. And basically none of the powder lies untouched. The mountain looks like it has been combed; the tracks cover everything.

Considering this, it is not surprising that people like Eriksen wants to protect their favourite spots. They are trying to prevent the hoards from tracking the snow in the areas where they want to ride. If somebody else finds it first it is used up and the favourite place loses its attraction, until another layer of white settles on it. Because of the nature of snow, its ability to recreate landscape and thereby again render that landscape valuable in a freeride context, it is a commercially auspicious commodity. Eriksen and his friends are protecting their knowledge so that they can use it themselves, so that they can consume their secret treasures in peace. It is a matter of protecting one’s own interests, a natural approach to a limited resource. But, in a place like Hemsedal, this secrecy is becoming an illusion. The mountain – like nature – is limited. Nonetheless, certain groups have a feeling of ownership to certain places which is reflected in

a practice of naming runs and the secrecy surrounding their locations. The feeling of ownership is an expression of the commodification of this landscape; if it can be perceived to be owned it can be perceived to be acquired.

The Popular and the Pristine

The consequence of untouched powder being the central object of desire to a freerider is that any mountain-face without ski or snowboard tracks is new. This implies that a snowfall sufficient to cover the old tracks on any given mountain again renders it untouched. If it snows every night, the mountain is new and different every day. New because it has no tracks marring its appearance, and different because snow and wind creates varying features from snowfall to snowfall. Only in the absence of new snow does a mountain get used up and only in the absence of new snow does it get left alone. The less snow that falls in a season, the more essential is the need to hunt in new areas. If the idea of wilderness is that of nature not visibly touched by human endeavours, then new snow creates and re-creates wilderness in the freeride context. An area can never be entirely spent as a freeride location as long as it is left undeveloped and the snow-cover is renewed regularly. But this new snow that covers tracks in the old snow does not protect against the impact of increased human activity. Even though the land is frozen, that which lies beneath is still to some extent susceptible to human influence. The peaks around Hemsedal ski-resort are subject to exceptional amount of human traffic in the winter months, and the boot tracks leading up to the easily accessible peaks are surrounded by urine, remnants of the tobacco-product *snus*, and other bits of garbage and waste. According to the director of agriculture and industry in Hemsedal municipality, Ola K. Frogner, no extensive research project has been carried out mapping the environmental impact of Hemsedal ski resort (Frogner 2009). But the presence of a ski-resort has the potential to upset the environment also outside of the clean-shaven slopes. “Skiers with their grinding turns compress the snow, which then transmits their pounding to the soil beneath. This affects the delicate balance of

the mountain world” (Huntford 2008:386-87). The delicate balance is easily upset, but small groups of enthusiastic skiers seem so insignificant. The mountain is covered in white, and new snow quickly covers every trace of the skiers that have ridden it. In a sense it is a perfect self-renewing commodity, and this contributes to the view of snow-covered mountains as invulnerable objects.

The importance of the aspect of beauty in this regard should not be underestimated. We are much more prone to protect and revere beautiful areas than those less so, but we are also more prone to use them. The appeal of a hike among mountains and waterfalls is to most greater than the same excursion in dense woodland. The most beautiful places tend to be the most visited. Is this also a dominating factor when choosing where to freeride? In all likelihood not, as aspects like accessibility, safety and degree of difficulty tend to dominate that process. Spectacular views are a bonus, but the view from most mountaintops can usually be described as such. Fadnes confirms this view. He does not differentiate between riding in completely pristine terrain and riding amongst infrastructure like power-lines or cabins. To him it is the riding that is important, not the view on the way. He nonetheless specifies that on occasions when he all of a sudden experiences a view completely free from cultivated elements and infrastructure becomes intently aware of that fact. Whether that is because it happens so rarely, even in the so-called wilderness, or because of the actual beauty of pure, non-manipulated nature, is difficult to determine (Fadnes: interview 18.12.08). The commodification of natural landscape in a freeride context is more connected to untouched snowfields than uncultivated nature. The commodity of highest value is the untracked mountain face, but the presence of infrastructure does not render it worthless. This may instead add value by introducing an unusual element.

But if the concept of wildness, of what is embodied in untouched nature, is not a central aspect of freeriding, why then do not all the participants stay in the vicinity of the ski resorts? Why do they approach highly unstable mountains where the avalanche danger is higher and the chance of timely rescue is lower?

Apart from the issue of crowding, one that has only in the past few years become of real concern to some, it may in part be because of the lust for newness, variations, and the ever-present desire to push the limits. Only through the continued provision of proof of the impossible can a sport like this evolve the way it does. Its expert performers are continuously fighting against the rules and the limits; opening doors, inventing new opportunities and leaving them open for those who are less skilled.

In a sense advances within map-technology do the same. Through the increasing availability of increasingly detailed geographical information, the geographers are opening the doors to new opportunities based on that new information. But whether this is only of a beneficial nature to individuals and to their interaction with wild nature is questionable. Instead of facing the pristine carrying a more limited but more solid knowledgebase we are lured towards the popular with fragmented information. In this knowledgebase there should also have been a strong foundation of ideals and motivations – in other words the very basic relation to meaning and purpose – aspects that in a commercialised approach to freeriding have been pushed into the periphery. “When the supply of information is no longer controllable, a general breakdown in psychic tranquillity and social purpose occurs” (Postman 1993:72). People lose track, and “have no way of finding meaning in their experiences” (Ibid:72). There are so many alternatives, so much information to process, that “the tie between information and human purpose has been severed” (Ibid:70). The information is detached from its foundation; it is “disconnected from theory, meaning and purpose” (Ibid:70). The meaning of the exploration of wild nature is diminished through the promotion of it and its particularities through popularised depictions and experiential accounts. The meaning of freeriding is shifted towards performance. To find meaning in quantification becomes a solution to the confusion of an uncontrollable flow of information about the wild, a way to sort experiences and landscapes and determine their worth. The wildness and the wilderness is counted and measured, quantified and compared. A quality that has value in and of itself and a form of nature that is worth seeking out for the sake of contrast are

domesticated, made more marketable and manageable and exploited for the purpose of economical gain.

5. Appropriating the Wild

Armed with technological aids we approach the wild, and with the help of our inventions we take possession of it. We appropriate the wildness of nature, and the wilderness is thus reduced to a commodity. And this appropriation is our manner in which to be in the world. We use, or consume, our surroundings in the ways that improve our existence in them. And we keep finding new ways of doing so. In a commercial setting this will eventually lead to the commodification of these surroundings, which in turn will alter our approach to them. “Using the world is the human way to fit into the world. [...] Only by applying knowledge do we improve our place in the world. And nature is itself the most fundamental tool” (Rothenberg 1993:67).

In this chapter I will give a brief account of the development of freeriding, describe how it branched off from the more conventional forms of skiing and clarify issues related to motivation. I will discuss different motivational factors driving the participants in their search for the perfect ride. By way of this I aim to explain the search for adventure and to show how this search and the motivations behind it are altered as a result of certain kinds of technological facilitation.

In Search of Particular Feelings

What motivates people to expose themselves to high levels of risk? And what makes them do it again and again? Ask the parachutist, the BASE-jumper or the freerider, and they are likely to tell you something about feeling alive, at peace or fulfilled. Stefano de Benedetti, who made the first descent of the east face of Mont Blanc in 1979, said he was pretty much ready to die when he was making his way down that mountain. And it would have been worth it, because he had never felt so completely alive (Obenhaus 2007). Telseth quotes riders saying they achieve a feeling of calm that they lack in other parts of their lives (Telseth 2005). According to Berntsen the strongest motivations for which to practice freeriding are “the feeling of mastery, the nature-experience and the

feeling of freedom” (Berntsen 2008:101). Within this cluster of motivations resides the element of risk, an element often presented as what participants in adventure sports are searching for. But it is perhaps not the risk itself but the mastering of it that is the element of desire.

Risk

“[R]isk is a straightforward consequence of the dangers inherent in the physical situation” (Douglas and Wildavsky 1982:193). In past societies we were exposed to direct risk on a daily basis. The danger of accident and disease were ever-present, and many had to engage in activity that put their lives at risk every day, just in order to survive. Existence was highly volatile, and the struggle of life revolved around issues of survival. This is still so for a substantial part of the world’s population, but for those residing in areas where social systems, insurance and general wealth are the prevailing tendencies, this is no longer the case. As a result we develop a different relation to risk and risk-factors, a relation that will fluctuate in relation to individual needs and social changes. “Not everyone needs the same amount of excitement and in the same shape and form. But everyone needs some” (Breivik 1998b:80). One result of this is the creation and rise of adventurous activities.

As pioneer Bill Briggs expressed in the documentary *Steep*: “Those of us who want the risk and want the challenge will do it one way or another. (...) I think we are getting a little bit too safe in our lives” (Briggs in Obenhaus 2007). One can consider the origin of the word ‘freeriding’ in light of Breivik’s words: “Only a person who risks is free” (Breivik 1998a:83). In order to be – or to ride – free you have to accept some level of risk. You have to have the courage, you have to make a bet, and do everything in your power to win. “The courage is just what is tested again and again in sport where risk can be an element” (Berntsen 2008:26). If that element is diminished and the activity is trivialised, then another way to increase the challenge will have to be invented. And as one of the central elements of freeriding is speed, it is relevant to consider Johan Borgen’s words

on the subject, from one of his contributions to Breivik and Løvmo's work *Friluftsliv*: "The opportunities of speed are soon spent, they cannot be increased except on the same plane: more speed. Until one lies there" (Borgen in Breivik and Løvmo 1978:113). Raising the challenge and increasing the speed will lead to increased risk. But as long as the risk is a catalyst for feelings of focus, control and mastery rather than for fear and disempowerment it can be said to be a motivational factor. The search for these positive feelings becomes a central reason for practicing the activity, and risk becomes a way of finding them.

The awareness and the perception of risk vary. In sports communities where risk is a central element it tends to be downplayed or exaggerated depending on the individual and the situation. The more common approach of experienced freeriders is the downplaying of risk. But an apparent disregard for risk does not mean a lack of awareness of it. Experience will lead participants in risky adventure sports to consider risk an inherent element in the activity rather than an unwanted aspect of it. Potential consequences are not so often thought of, but are still never forgotten. Through frequent exposure to certain kinds of risk, the perception of it changes. One is still aware of its presence, but it is perceived to be more tolerable. It is when the awareness of risk is affected that it leads to a false sense of security and a subsequent loss of perspective on one's own position in relation to nature and the sport. This awareness is affected by technological aids. Leaving landscape recognition up to the GPS, in the sense that you do not need to pay attention to the landscape in order to know where you are going, can lead to diminished awareness of movement in relation to landscape. Implementing the most sophisticated physical extensions of one's body, the best possible equipment made to lessen both the risk and the challenge of those particular conditions, can lead to diminished awareness of the potential consequences of the situation. Coupled with a lack of experience and a consequential poor perspective on the activity this can lead to exposure to unnecessary high levels of risk and a failure to appreciate the particularities of landscape and the value of experiencing that landscape.

Empowerment through Risk and Adventure

Adventure in the basic understanding of the word is about exciting and unusual experiences. In the context of freeriding, the unusual is the particular form of interaction with the particular landscape. It is in part the choice to descend a snow-covered mountain on skis that makes the freerider stand apart. And it is in part the feeling of complete control and autonomy that produce a feeling of accomplishment. Bob Barton, author of the work *Safety, Risk and Adventure in Outdoor Activities*, suggests that some of the reasons behind the contemporary focus on adventure are related to the way our society is organised, and points to the fact that “many of the decisions once handled by an individual himself or herself, in matters of both life and death, are made today by people and institutions in possession of knowledge unavailable to the wider public” (Barton 2007:201). We have to some extent been disempowered by our social systems and know less about the processes that govern our lives than we perhaps would like. According to Breivik this process was completed in the 1980’s, when “welfare-society had put the individual under guardianship” (Breivik 1998b:24). But by seeking situations of risk, in which we are at the complete mercy of our own decisions and actions, we can counteract this loss of control over our individual lives. We can through these situations achieve a feeling of momentary mastery that can result in a more general feeling of control and autonomy.

One reason why people seek situations of high risk and uncertainty is to compensate for the lack of such in their everyday lives. We seek contrast, and as our lives became passive and safe we wanted activity and risk (Ibid:25). The risks we actually are subjected to in our everyday lives are largely invisible, such as that of nuclear war, climate change, toxins in the air, water and food. Or, what Ulrich Beck, professor of sociology at the University of Munich, calls “the threatening and destruction of the natural foundations of life” (Beck 1992: 51). Most other kinds of risk, those connected to accidents and potentially dangerous situations, are attempted eliminated by those governing our lives. Domestic life, work and recreational activity all contain potential risks, and the role of the

governors is in some way or other to protect the people against these risks. The biggest effort seems to be spent on protecting us against ourselves. One consequence of this is the ever-increasing amount of laws demanding helmets and padding, and the banning of things deemed too dangerous for people to play with.

“Life has become constrained, controlled and commoditised to a point where many have forgotten what it is like to have this intensity of experience with nature, with oneself” (Barton 2007:1). We strive to make life safe. We remove direct risk from our everyday lives to such an extent that some people spend all their free time seeking it out. And then proponents of technology present new findings that make risk-seeking safer, more organised, something almost everyone can partake in, without the need for experience, training or any particular knowledge. “We may be in danger of risk being sidelined as an undesirable by-product of adventure activity, of it being treated as the carcinogen to be eliminated from an otherwise healthy diet, rather than being recognised as itself an essential nutrient” (Ibid:3). By focusing our energies on the reduction of risk we are reducing our opportunity to master it and the feelings it awakens in us, and thereby reducing our potential for development as individuals and as a species. Foolproof navigation removes the risk of getting lost, and through the acquisition of all available safety equipment one can greatly reduce the risk of accident while riding a mountain. This changes the perception of the activity as it is made safer through the implementation of technological solutions to the perceived problem of risk. It also changes the point of intersection between technology, nature and freerider, giving technology a more prominent position in this interrelation.

Safety in Numbers?

The growth of freeriding as a sport has resulted in increased traffic of the more popular summits, and this presents new issues of risk and safety. In the freeride context there is no safety in the presence of several groups on a

mountain. Four or five groups of freeriders on a mountain, all in different stages of the journey, will surely represent a higher level of risk than had there only been one group at the time. The risk of an avalanche increases with movement, and numerous people hiking up and riding down simultaneously has clear implications. This is a problem that currently seems to be gaining attention in the media. The radio channel *NRK Alltid Nyheter* (NRK Always News) did a report in January 2009 claiming that the relatively low number of freeride-related accidents was a result of pure luck. FriFlyt published an article on their website on January 26, 2009 stating that it was only a matter of time before the occurrence of a serious accident in Hemsedal, as long as people did not respect the warnings or possess basic knowledge of avalanche risks and procedures (Berg 2009). In an area like Hemsedal, where so many people come to enjoy the pleasures of powder snow and where all want to set first tracks, the issue of independent groups endangering each other through unawareness and ignorance is considerable. And the problem will be of a more pressing nature when these hoards of ‘powder-dogs’ are let loose on the immense expanses of terrain with their pockets full of navigational aids and experiential accounts they aim to surpass. Now, we can say that this trend will limit itself. That many will never venture outside the relative safety of the patrolled ski-resorts and surrounding areas due to factors like risk, comfort and physical limits. I say that the limiting powers of factors like risk and comfort are changing in tune with technological developments, as these are rapidly changing the demands on the individual. If the current trend continues, ski-resorts like Hemsedal will become less and less attractive to a freerider in search of untouched powder. The crowds are getting bigger every year, and the mountain is limited; those hunting untouched snow will have to look elsewhere. The ideals, the gimmicks and the media emphasis with regard to freeriding are those of pristine snow and the individual experience of mastering a mountain on skis or snowboard; it seems likely that this either will have to change, or that the people seeking those ideals will have to fan out in their search for them.

Is the result of technological development that facilitates access to these regions and the commercial visibility of trendy activities a need for stricter regulations? Can these technological advances lead to restricted access? Considering the contribution of Katrine Heimdal from the Norwegian Department of Justice during the avalanche conference held at Stryn in 2002 it seems as though it is just a question of time. She there speaks of ‘extreme ski-sport’ as a development it is impossible to stop. Even though there are many forces working hard to ban it and activities like it (Heimdal in Kristensen 2002). These kinds of activities are often initially seen as the evils of outdoor recreation by communities interacting with them, as they invoke fears of accidents and costly rescue operations in addition to potential disturbance to more traditional activities. One reaction is a demand for restriction in the form of the exclusion from certain regions, or some form of regulatory impediment. In Norway this has taken on several forms, the most recent of which is a debate around whether it should be mandatory to employ a guide when freeriding in Lyngsalpene, an area in the north of Norway known for its exceptional freeride opportunities. The mayor in Lyngen, Hans Karlsen, has expressed a wish to make it mandatory, since so many people are travelling there to freeride during the spring months without particular knowledge of the area (Sande 2009). With increased access follows increased traffic, risk and number of accidents. The technology that facilitates the activity and makes it safer on an individual basis also has the potential to result in more accidents on a communal basis, due to increased ease of access, subsequent higher frequency and lower demands with regard to previous experience.

Seeking Adventure and Challenge

“Without uncertainty of outcome, without risk, we may have a very fine recreational experience, but we no longer have adventure” (Barton 2007:3). So when technology has successfully rendered an activity safer, the practitioners who chose it for the thrill, the uncertainty of outcome, will typically push the

limits further. The same technology that made one level of activity safer enables the risk-seekers to approach new parts of nature, new peaks, new terrain, and again challenge boundaries, frontiers and personal limits. And when technology opens new opportunities for a relatively small group of specialists it tends to open that group's old territory - or playground if you like - to a larger part of the community. The small group of specialists takes advantage of the potential presented through technological development and access to nature; they make the first tracks, the first descent, set the standards and raise the proverbial bar for what is possible, showing the way for the larger group of people looking for the same kind of experience. The specialists invent potential in landscape; establish foundations on which to form sports culture. Their search for adventure reinvents the landscape, turning it into what they need it to be, through a creation of an activity that can be performed using that landscape.

According to Breivik, the search for adventure is a result of the practices of modern society. In it we exist in a reality where we are so sheltered and protected that we never get to see what our actual limits are. "We do not know what we are made of, what we can stand, what we can do" (Breivik 1998b:38). It seems likely that we therefore have to challenge ourselves, our limits and our abilities, in order to find this out. In addition to challenge, the element of change, or contrast, is also essential. Fadnes claims one of his motivations for venturing into the wild to be to escape from the passivity and noise of his life in the city. He needs change, challenge, and removal from that which crowds and clouds his life every day.

"There's a lot of passive reception of stimuli; TV, internet, radio, sitting in cafés, listening to music. We just sit there and receive. And there's a lot of noise. There's always noise. And there is no challenge. It's all so easy. You're never wet and cold, or hungry. It's about the contrast" (Fadnes: interview 18.12.2009).

He leaves the shelter of the city, the routine and the situation in which he is a receiver, a receptacle for the products of society, in order to experience the opposite. The implementation of technology that interprets landscape and quantifies the experience is a kind of extension of this situation into the realm of adventure. Again one is reduced to a receiver of information, instead of being a processor of the same. If our limits are extended and our abilities are increased by the continuous development of new technology, then we subsequently have to increase the challenge.

This tendency to up the challenge, to always push the limits a little further, is to be found within most kinds of human endeavours. Achieving the most difficult goal, reaching the highest mountain, being fastest, being strongest; the Olympic motto CITIUS – ALTIUS – FORTIUS (Fastest – Highest – Strongest) extends far beyond the arenas of organised sports. If we consider expeditions in Himalaya, and the vast increase in people setting out to reach one spectacular peak or another, it seems apparent that the desire to climb the highest mountain is a prevailing tendency in contemporary society. This development is strongly linked to a clear increase in affluence. Expeditions cost money, and they demand time. Both of which the ‘explorers’ have, seemingly in abundance. And if they do not personally possess the material means to reach the top they acquire some kind of sponsor. Of course one then has to do something special, or be someone special, as there are so many people doing, or wanting to do, the same thing. One has to be able to appear marketable in combination with one’s project. The quest to be in some way unique is perhaps most easily completed through impressive physical achievement. But it is increasingly difficult to stand apart, as it becomes easier to perform. In most forms of adventure, as in freeriding, “it becomes increasingly difficult to create a ‘name’” (Telseth 2005:151). And as technology facilitates these adventures, so the adventures have to develop; become more impressive, more unique and to seem more and more impossible in spite of all existing technology. First it was about reaching the top, then reaching it alone, then reaching it alone and without oxygen. An increasing amount of people are embarking on expeditions. The popular summits are crowded. The endeavours of

these people are broadcasted and used as advertising. And the publicity is attracting more adventurers. Will we ever grow tired of reaching summits, negotiating abysses, being there first? What is the next rung on the ladder to the most impressive achievement?

On Different Terms

The more cushioned our daily lives become, the more protected we are from danger. And the more technology we develop to help us on our way, the more parts of nature will be subject to our need to test ourselves. With better technology comes increased availability, lower risk, increased popular appeal. And with increased appeal comes commercial industry. Some people have tried to revert to older equipment and less technological solutions in order to increase their personal challenge. To repeat endeavours in order to prove or disprove their difficulty. Stein P. Aasheim and his crew crossed Greenland in the footsteps of Fridtjof Nansen in 1988, exactly 100 years after Nansen set out, using the same equipment and without any outside assistance. How do contemporary outdoor adventures compare to the feats of the pioneers of the past? According to Aasheim they are quite dissimilar. He wrote in the Norwegian Trekking Association's yearbook of 1988 that Nansen's expeditions were hazardous and poorly planned in comparison with today's equivalents (Aasheim 1988). According to him this was so regardless of the differences in equipment and available information; he mentions that Nansen had never slept in a tent in the mountains in winter, and that the team had never trained together before departure, to support this view (Ibid:139).

There is currently a Norwegian adventure-travel company called *Hvitserk* that arranges Nansen's – and Aasheim's – journey for you. This commercial version makes use of modern equipment, but lets you ski across Greenland, from East to West, in Nansen's ski-tracks (Hvitserk 2009). But these expeditions and those like that of Aasheim, do not have quite the same effect as the achievement of something new or different. After all, it is no longer a pioneering act. As one

of the participants in the reconstruction of Nansen's adventure, Nils U. Hagen, wrote after its completion: "In a pioneer deed the mental strength is of greater significance than the physical effort. (...) In 1888 there was no help to be got in the event of a life-threatening situation. (...) We could, if necessary, activate the emergency beacon" (Hagen 1990:30). The expedition was a repetition, one that was equal to the original in all but the level of risk and the amount of knowledge and experience present amongst the participants. Aasheim and his men had much more of both of the latter, and they always had the chance to ask for help from the outside. Through their choice of equipment they managed to recreate the physical elements of Nansen's expedition, but to create the same level of mental pressure is impossible. The mental strength required to succeed in a pioneer deed where rescue is not an option, far surpasses that required to succeed in repeating the deed with a satellite phone in the bottom of one's backpack. The implementation of such safety measures and aids in the form of equipment or navigational aids make more people dare take the step away from the beaten track, necessarily leading more people to embark on adventures. They are no longer required to possess exceptional mental strength, and should their physical strength give way there is always a fair chance of rescue.

Once a mountain has been ascended by man it is forever altered in the minds of people. Fadnes speaks of solving the riddle of the mountain, and once it has been solved that mountain is no longer seen in the same light. It no longer contains the element of mystery; it has been ridden and is therefore conquered. This view is a reflection of our general approach to nature as something that is subject to our will, something we can master. This is part of the reason for the enormous focus on the hunt for newness, for differentness. It directs the adventurous among us to walk new ways, while it also fuels the continuous development of new technology.

To leave issues of safety to chance, or indeed to embark on expeditions where chance of survival is completely determined by knowledge and luck, is highly criticised in contemporary adventure communities. When expeditions fail

the participants are accused of taking too many risks. Risk should apparently be an accurately calculated element, measured and analysed in order to wrest it of its unpredictability. It is then packaged and marketed as being acceptable but still present, and sold as adventure. The risk element, or rather the potential for mastery of risk, is commodified.

The Element of Play

Aside from containing elements of risk, and of being a form of adventure, freeriding is also about contrast. Fadnes mentions the difference between his life in the city and his life in the mountains as a motivational factor. The search for something unpredictable, new and exciting has also been suggested to be the same. And the one type of activity that embodies all of these factors – and more – is play. The way we learn new things as children is also something we seek as adults. Our everyday lives do not provide sufficient challenge with regard to interacting with nature, and for this reason adult play will for many take the form of the testing of personal abilities in contact with nature.

The aspect of play can be said to be one of the defining aspects of the sport, and Telseth states that freeriding is primarily a playful culture (Telseth 2005:65). Berntsen's point about the participants turning to freeriding as a reaction against organisation, regulation and control supports this (Berntsen 2008). Instead of having to follow a set pattern freeriding allows the unfolding of creativity and therefore of potential⁴. But this element of play is diminished through a quantification of the experience. And the nature of the sport is altered along with the perception of the environment in which it is commonly performed. Playing is a way of learning and a way of testing oneself and others. Not in order

⁴ Gunnar Breivik has written extensively on high-risk sports and sensation seeking, and his publication series *Skrifter i Utvalg* is helpful in beginning to understand the underlying motives and mechanisms present in these sports and in the minds of the participants.

to win but to better get to know both oneself and external factors. As soon as the purpose of the activity becomes a question of exhibiting skills and abilities, the element of play is diminished and the activity is reduced to a show. The practice of continuously publishing one's adventurous accomplishments on the internet and displaying them to the world can be seen as an expression of this kind of alteration of motive. It is a great opportunity to show the world that you too have been on that mountain, that you too can ride that line. You can also go there, and you are a little bit closer to having been everywhere, a little bit closer to winning. You can show people how great you are by exhibiting a record of your exploits, thereby displaying your freerider-identity and asserting your place in your community of choice. The experience, which started out as a form of play, has then become a means by which to promote yourself. If all that is left is a race for the most spectacular run, a race to be the first one to track that pristine snow, to mark the mountain and to tell everyone about it, then freeriding will lose its ideals, or soul, or underlying motivational factors. It will have succumbed to the pull of commercial industry and thereby lost all elements of exploration. Everything will be known, familiar, marketed. The value of the experience – and of the landscape – can be measured, plotted and graded like a collection of waypoints in a GPS receiver.

Flow

Further exploration of this potential loss of the aspect of play in freeriding as a result of commercialisation brings us to the research of Mihalyi Csikszentmihalyi. Csikszentmihalyi researched what he called flow experiences; those experiences that invoke expressions like 'being carried away'; to lose oneself in the action, in the moment; to experience a unity with oneself and the surroundings (Csikszentmihalyi 1990, in Breivik 1998b:33). The experience is the goal in itself, the result does not matter and the participants need no reward other than the one they experience while participating in the activity. The flow experiences can therefore be seen as a result of play, but are not limited to the common perception of play as carefree activity. A state of flow is a state where

one acts on instinct and where conscious reflection on action is not a part. One acts before thinking and often claim to have felt more alive in that moment than in all others. Another result of these kinds of experiences is a feeling of unity with one's surroundings (Breivik 1998b:34). Breivik describes it as a removal of the barrier between person and environment, and supports this by referring to the anthropologist and philosopher Gregory Bateson's perception of unity between body and action (Ibid:34). A division between the person and the act is artificial, if we see the act as an extension of the person. Equipment used to act as extensions of the body will seem to be part of the person when used in the act. Skiers and snowboarders speak of feeling their equipment disappear while they are in the midst of action (Telseth 2005:98). And through the use of these extensions our abilities are enhanced. Our relation to the environment is immediately altered and the "direct extensions increase our confidence as we step, strike and dig our way through the world" (Rothenberg 1993:31).

Extensions and Barriers

When I present technology as a potential barrier between the individual and the wildness of nature it is important to differentiate between technologies. Technological equipment that is worn as adaptors between our bodies and the surrounding elements has the ability to become part of ourselves and our actions. The technological adaptors of the body are mere physical extensions, and thereby expressions of a relatively uncomplicated and developed field of knowledge. Technological equipment that is implemented as adaptors between our minds and the surrounding elements may in certain contexts instead act as inhibitors or limits, as they can limit the reaches of our comprehension and the nature of our experiences. In certain contexts these extensions substitute cognitive processes. Consider the detrimental effect of using a calculator for even the simplest equations when learning math as a child. Technological adaptors of the mind are attempting to recreate certain human analytical processes, something we as a species have not yet been able to do. "Machines that extend cognitive dexterity

independently of our guiding movements reinforce just those aspects of our thought which can be precisely codified into terms which a machine can understand” (Rothenberg 1993:38). With regard to navigational aids such as the GPS receiver, the analytical process of spatial perception is attempted replaced by information technology. The receiver provides the information on one’s current position and desired direction if the route has been programmed. The need to navigate is replaced by a technological tracker, and the cognitive processes usually involved in this work meet a barrier of information and are left idle.

What was previously an escape from regularity and control, a form of play in which the participants could experience a feeling of flow and become absorbed to such an extent that “the activity became reality itself” (Telseth 2005:145), is, through the technological substitutions of mental processes, reduced to an experience mediated by technological interpretations. Instead of looking at what is there and interpreting it ourselves, we can see somebody else’s view and interpretations, put that through further computer analysis and be left with a thoroughly analysed view of what we are facing. But no matter how good that interpretation is, and no matter how high the quality of the cartographical processes behind its construction are, it will not be the interpretation of the individual. The GPS receiver is in a sense the commodified version of navigational ability, as it replaces the need to know the way.

The Untouched and the Unknown

Untouched nature, or the illusion of its existence, has become a utopia reflected in many aspects of our interaction with nature. The previously mentioned rise of the commercial wilderness adventure tour is an expression of this tendency. But this search for the untouched can also be seen as a search for the unknown; that with which we are unaccustomed and unfamiliar, and that which in some way still represents an unknown challenge.

To be the first and to venture into the unknown are aspects to adventure and exploration. They are both expressions of mastery as a result of the unveiling of mystery. By being the first to lay the mountain beneath one's skis one has expressed the ability to do so on one's own and not merely by following someone else down. The unknown is now known to that skier or snowboarder, and his or her knowledge is displayed in the form of the tracks in the snow.

Leaving Your Mark on the Mountain

In almost all commercial illustrations of freeriding there is only one track in the snow, the one made by the rider depicted. For an image to be of high commercial value it has to embody the most spectacular and rare. And most freeriders will agree that the most fantastic runs are typically in untracked snow; pristine powder that makes the mountain appear completely untouched by human endeavours. Riders will walk far in order to find these powder-pockets in the vicinity of the ski-resorts, and the hunt for untouched areas is among the main motivations behind leaving the resort and venturing into the wild. This desire often causes riders to choose terrain and runs that are less than optimal, just to be able to set the first tracks. The element is of such importance that some of the other elements of the experience are sacrificed for the sake of it.

There is a feeling of accomplishment connected to being the first to carve a signature on that particular snowfield; to be able to look back on the mountain and see the tracks, the mark on the remarkable, proof of courage and momentary mastery of the mountain. It has been branded, laid beneath the skis of the human race. And it will look very different to the rider than it did prior to that descent. "If I have never been on a particular mountain before, it tends to tower up, becoming twice as big in my head as it really is. When I have been on a peak, I am totally fascinated by how defined and easy the trip was." (Fadnes: interview 18.12.2008) Fadnes here explains how experience has altered his perception of that particular piece of the wild. Arne Næss, the Norwegian eco-philosopher who

was one of the pioneers of climbing in the modern sense, also reflected on the relation between what is known and its effect on perception and experience.

“In order to maintain the inner experience one must normally seek a little steeper, a little wilder, a little more dangerous things than before (...). Fewer and fewer steepes and summits are unknown and secretive. More and more of them are tamed and their greatness decreased. Physical size does not have anything to do with it after all; it is the perceived size that matters. (...) The wildness, greatness and sovereignty of the mountain are not geological characteristics, but are determined by the relation to the person experiencing it. Most kinds of interventions, also the collective protection “against” the dangers of the mountain, reduces and trivialises” (Næss in Zappfe and Setreng 1997:7)

The Search for the Unknown

In his work *Always the Mountains*, Rothenberg also expresses concern for the loss of the unknown: “the unknown is where I want to be, and I will only be there if I do not know where I am” (Rothenberg 2002:ix). But to not know where you are is not as easy as it used to be. Our society is working hard at eliminating this source of uncertainty. That it is sought after by some is not commonly considered. The only option for those wanting to experience disorientation on some level or other is to step off the technological ‘train of progress’ and refuse access to the well of information available to his or her contemporaries.

The unknowns are dwindling in numbers. And as we seem to have in some way covered most of the planet, it is relevant to consider, as Aaron Wildavsky and Mary Douglas have done, that “[t]he advance of science increases human understanding of the natural world. By opening up new realms of knowledge, however, science simultaneously can increase the gap between what is known and what it is desirable to know” (Douglas and Wildavsky 1982:3). Douglas and Wildavsky here probably pointed to the tendency within science towards a kind of unravelling of the world; by removing one rock one exposes an

array of others that will have to be examined as well. In the context of scientific discovery this interpretation and tendency is easily understood. But in our recreational interaction with nature it can, as an experiment, be interpreted in the opposite direction; the gap becomes negative, and what is desirable to know is less than what is known. The unknown is some of what we are searching for, because the act of making it known presents feelings of mastery and accomplishment. It becomes important “to embrace the unknown, not to reduce it to knowledge by knowing where to look the answers up” (Rothenberg 2002:22). Through the elimination of the unknowns at the hands of others we are losing the aspect of exploration, and with that a great deal of the motivation behind leaving our daily routines.

When we are presented with all the information we could want and need about an activity, the nature of that activity changes. We no longer have to figure things out for ourselves but can cruise through, comfortably resting on the findings of others. The whole aspect of being first is removed through the appropriation of these information technologies, and any element of mystery is removed. If we here consider the previously examined connection between mystery and wildness, and the fact that the unknown is per definition mystery, information has the potential to eliminate the wild. Fadnes found a kind of attitude towards nature in the writings of the Norwegian pioneers of climbing, like recently deceased Arne Næss, which he links to the amount of available information.

“The pioneers of the 1960’s and 70’s speak of the mountains in Isfjorden as if it was Himalaya. And I have often wondered why. Because these are resourceful people, these are the hard core guys who shaped the Norwegian extreme outdoor activity culture. They surpass most of our contemporaries. And it is all about the unknown. They entered into what they didn’t know. While we to a certain extent take the back door. The result is that it’s not just the hard core guys who can venture into the unknown, but many others also. Where we haven’t been and what we

haven't seen with our own eyes isn't unknown in the same sense anymore."

The well of information that is now available, the lure of better technology and the simplicity of navigational aids, may result in more people taking the step away from the beaten track. In Odden's words, "better clothing and GPS-maps [can] make more people dare embark on hikes in the mountains" (Odden 2008:275). The perceived risk is strongly reduced, strange places are made familiar, and the difference between the Sunday hike and an expedition is diminished. This entails a great increase in freedom of movement. Suddenly nature beyond the marked trails and slopes is not so wild. At least not in our minds, and, as we have established, it is the perception that actually counts.

When Denis Cosgrove stated that "mapping unfolds potential, it remakes territory over and over again, each time with new and diverse consequences" (Cosgrove 1999:213) it expresses the power of the map in the determination of use and perception of that territory. Through the increasingly correct and detailed mapping of Norway's mountains, more potential areas for freeriding are revealed. Mountains that previously maintained an air of mystery due to lacking topographical knowledge have been publicised. In a sense that mountain has been remade, it has come to represent something different than what it did before. It has been transformed from an unapproachable subject to an approachable object. This loss of mystery may entail a loss of reverence and perhaps also of respect on behalf of the viewers. Those eyeing the mountain for freeriding purposes will change their attitude towards that mountain when obtaining complete knowledge of its features and natures. The unveiling of nature's mysteries could result in an appropriation of the mountains, the subordination of nature into culture, but perhaps also allow for a more complex understanding of nature in and of itself. Rothenberg gives hope for the latter: "Using the world, we have a chance to recognize its inherent value as well" (Rothenberg 1993:70). Maybe the availability of digital maps, GPS receivers and 3D visualisations will enable people to venture a little bit further into that which

do not seem so wild anymore. And perhaps these ventures will create a new kind of reverence built on knowledge rather than mystery, as the mountainous regions of Norway are de-mystified by technology.

Summary and Conclusion

Our approach to the wild is characterised by our tendency to appropriate our surroundings. We invent tools that facilitate this appropriation, and the technologies we implement to describe, analyse and manage the physical world are a substantial part of this. The principles forming the basis for these technologies are those of measurement, organisation and classification – principles that coax simplicity out of the complex relations of nature. I have argued that the perspective presented by way of this approach is insufficient in dealing with the complexity of our surroundings. It is important to retain focus on the value of direct interaction with nature and not be seduced by the ease of technological facilitation. This is true both of the physical facilitation of direct interaction and of facilitation of analysis and management.

When the information generated by technology is presented as knowledge of the physical world, it changes our way of interacting with it. And when our interaction with nature is subject to extensive facilitation, it changes the conditions of that interaction. In a sport like freeriding this can result in an alteration of approach to the world that provides the opportunity for this kind of activity, and subsequently in a change in the assignation of value to that world. The development of technology that reduces the need for knowledge among the individual aids a tendency towards the commercialisation of freeriding, by creating a need for this kind of facilitation. The commercialisation then causes a shift in value from personal experience to exhibited performance.

Our perception of wildness depends on our relation to it, and an increase in the availability of detailed geographical information about wild nature and the quantification of wild experiences resulting from an increasingly technological approach diminishes the concept in our perception. Wildness and wild nature represents that which remains unknown to us, and are valued in part for that reason. The implementation of technology that eliminates the factor of the unknown deprives us of this element. This leads people who seek it as contrast to

an organised and regulated existence to invent new methods by which to experience this contrast. The technology eliminates what we seek in order to facilitate the search, creating the need for a further expansion of that search.

I have shown how maps provide the basis on which we form our perception of the physical world we inhabit. They “precede the territory they ‘represent’” (Pickles 2004:5), and our understanding of this world is therefore in part determined by information presented to us through map technology. But when technological interpretations and tools become our primary determinant of how we comprehend our relation to nature and value our interaction with it, these tools and interpretations can exert detrimental effect on this relation and interaction. We use technology to bring us closer to an understanding of nature, natural progress and natural order. But part of what we achieve through excessive implementation of technology could turn out to be increased distance. Map technologies and navigational technologies are information technologies, and not providers of knowledge.

I have displayed how freeriding can be seen as a development upon the tradition of outdoor recreation, a form of activity originally sought for reasons of contact with nature and the rewards of movement in the physical landscape. I have further established that commercial forces and a general social tendency towards the measurement of performance and quantification of experience contributes to an alteration of ideals. This also leads to increased focus on the quantifiable elements of interaction with nature. The roots of this problem do not necessarily reside within the sport itself, but adventure sport in general and freeriding in particular become expressions of this tendency. The technology that is implemented promotes the significance of facilitated movement, on the grounds that it leads to improved performance, making facilitation a goal in itself and diminishing the aspect of actual interaction with the surroundings.

There is an ongoing alteration of the purpose for which to seek the experience it is to ride a snow-covered mountain. A change supported and

helped along by increased focus on technological facilitation of the activity. Participants are adopting extensions of social conventions in the form of navigational aids, assigning increased value to aspects that reflect the conventional value system of quantification. The danger is that part of the purpose of leaving a facilitated urban existence disappears, when existence in the wild becomes increasingly similar to that which we attempt to leave behind. We lose the element of contrast if we import the ideas and the accompanying technologies of urbanity into wild nature. And if the emphasis shifts from the development of skills and the exploration of both self and nature to the quantification of experience for the purpose of exhibiting performance, an important element of that experience is lost on the way.

The problem does not necessarily lie within the technology, but rather the uncritical implementation and use of it. By adopting tools that replace the need for powerful cognitive abilities like navigation we are reducing these abilities and become increasingly dependent on our inventions in our interaction with nature. This is not a call for a return to past technologies. Old, outdated tools do not bring us closer to nature. But neither do the new. This is an attempt to encourage a more critical attitude towards the technology one chooses to implement in the experiences one seeks in the wild. The fast pace of contemporary society leaves less room for things like preparation and contemplation, and in order to compensate for this the tendency is to implement technological aids. I have found that a result of this is that the actual value of the experience, as contrast to an organised and structured daily existence, is diminished. This in turn promotes the view of wild nature as a stage on which we are free to perform our favourite pastimes, instead of a part of our surroundings that we seek out for the sake of experiencing it in itself. The emphasis is shifted from experience to performance and the activity is reduced to a show.

This show that is performed on nature's stage is also a method by which to increase personal status, as it is seen as a courageous confrontation of wild nature, of wildness itself, the prime symbol of otherness and the unknown. To

challenge the unpredictability of nature through the negotiation of a snow-covered mountain becomes a means by which to assert social position, and technology becomes the prime associate in this quest. According to my findings the result is an approach to nature as a commodity to which we can purchase facilitated access in order to improve our position in the world. The motive is altered, and instead of reaching for the summits as a way of returning to the world outside of the one we have constructed for ourselves, we chase the quantifiable elements of the experience as measures of our performance in that world.

It becomes a question of what kind of view of nature we should nourish; whether we should allow wild nature to be reduced to a stage and become another commodity to be acquired and disposed of when it has fulfilled the purpose we have assigned to it in the context of leisure. It becomes a matter of what kind of effect the uncritical adoption of technological facilitators have on the relationship between human and nature, or freerider and mountain. Freeriding is an expression of a search for adventure, for contrast, and that which is still unknown to us as individuals. Through a technological unveiling of mystery the activity is deprived of part of its potential to fulfil this desire. By depending on our technological interpretations of the physical world, these new ways of seeing the world will alter the world in our perceptions, making it less nuanced, less varied and in turn perhaps less valued. If we are no longer dependent on seeing nature as we move through it, but instead only focus on our own movement in it, then this form of interaction loses its tie to the landscape and becomes another endeavour characterised by a search for speed and a quantification of physical performance.

“We still look at the world in wonder, but live in the world we make” (Rothenberg 1993:49). There may be a point in leaving more of our increasingly sophisticated constructs behind when we venture into the world that still exists beyond them.

Bibliography

- Aas, Erik jr., Landskapet og mennesket, in *Samtiden* 1977, hefte 3:138.
- Aasheim, Stein P. (1988): "Arven fra Fridtjof Nansen" in *Folk i Fjellet*, DNT's Årbok 1988. Oslo: Den Norske Turistforening.
- ABS (2009): "ABS – Avalanche Airbag System," [online].- URL: www.abs-airbag.com (retrieved 10 April 2009).
- Alpinanleggene (March 2009): "Heisomsetning sesongen 07/08." [online].-URL: <http://www.alpinanleggene.no/index.jsp?c=2447&exp=2447> (retrieved 10 March 2009).
- Barton, Bob (2007): *Safety, Risk an Adventure in Outdoor Activities*, London: Paul Chapman.
- Beck, Ulrich (1992): *Risk Society – Towards a New Modernism*, London: Sage Publications.
- Berg, Simen (26.1.2009): Dypsnø med Bismak, in *Fri Flyt* [online].- URL: <http://friflyt.no/index.php?pagenr=12&artiklenr=56343>
- Berntsen, Ingrid (2008): *Frikjøring: kjennetegn ved norske frikjøringsutøvere og miljøet rundt dem*. Master thesis. Norges Idrettshøgskole.
- Borgmann, Albert (1999): *Holding on to Reality*, Chicago: The University of Chicago Press.
- Breivik, Gunnar (1973): "Friluftsliv – En Vei til et Nytt Samfunn". *Mestre Fjellet* 16: 23, 39.
- Breivik, Gunnar (1974): "Friluftsliv". *Mestre Fjellet* 19: 5.
- Borgen, Johan (1978): "Veien i Oss Selv" in Breivik, Gunnar and Løvmo, Haakon: *Friluftsliv fra Fridtjof Nansen til Våre Dager*, Oslo: Universitetsforlaget.
- Breivik, Gunnar (1998a): *Bevegelse, Risiko og Fornyelse*, Skrifter i Utvalg, bind 9. Norges Idrettshøgskole, Oslo: Institutt for Samfunnsfag.
- Breivik, Gunnar (1998b): *Jakten På Spenning*, Skrifter i Utvalg, bind 10. Norges Idrettshøgskole, Oslo: Institutt for Samfunnsfag.
- Bølstad, Terje (2009): "Et Vanskelig Valg", in *UTE* vol.42, April/May issue, nr. 2/2009.

- Christensen, Olav (2001): *Absolutt Snowboard: Studier i Sidelengs Ungdomskultur*. Dr. art. Dissertation. Universitetet i Oslo, Det historisk-filosofiske fakultet.
- Cosgrove, Denis (ed.) (1999): *Mappings*, London: Reaktion Books.
- Cosgrove, Denis (2008): *Geography and Vision*, London: I.B. Tauris.
- Dahle, Øystein (1991): "Enn om vi vernet fjellet", in *Fjellet i fare - mangfold og samspill* - DNT's Årbok 1991:157-165, Oslo: Den Norske Turistforening.
- Direktoratet for Naturforvaltning (28.11.2008): "Allemannsretten." [online].- URL: <http://www.dirnat.no/allemannsretten/> (retrieved 11 October 2008).
- Direktoratet for Naturforvaltning (11.03.2009): "Statistikk." [online].-URL: <http://www.dirnat.no/content.ap?thisId=1009392> (retrieved 14 April 2009).
- Dorling, Daniel and Fairbairn, David (1997): *Mapping: Ways of Representing the World*, Harlow: Longman.
- Douglas, Mary and Wildavsky, Aaron (1982): *Risk and Culture - an essay on the selection of technical and environmental dangers*, Berkeley: University of California.
- ESA (17.7.2007): "What is EGNOS." [online].-URL: http://www.esa.int/esaNA/GGG63950NDC_egnos_0.html (retrieved 12 February 09).
- ESA (17.7.2007): "What is Galileo." [online].-URL: http://www.esa.int/esaNA/GGGMX650NDC_galileo_0.html (retrieved 12 February 2009).
- Evernden, Neil (1992): *The Social Creation of Nature*, Baltimore: Johns Hopkins University Press.
- Faarlund, Nils (1973): "Hva mener vi med friluftsliv? Om nødvendigheten av en grenseoppgang", *Mestre Fjellet* 15: 4-6.
- Faarlund, Nils (2009): "Levendegjør norsk friluftstradisjon!", *UTE* vol.43, June/July issue, nr. 3/2009.
- Finn 3D-Kart (2009): "Finn 3D Beta," [online].-URL: <http://kart.finn.no/3d/> (retrieved 14 May 2009).
- FriFlyt (28.09.2005): "GPS." [online].-URL: <http://www.friflyt.no/index.php?pagenr=32&threadnr=132642> (retrieved 12 February 09).

- FriFlyt (04.03.2009): "Teknologien i skredsøkere." [online].-URL: <http://www.friflyt.no/index.php?pagenr=32&threadnr=223131> (retrieved 12 February 09).
- Frislid, Ragnar (1991): "Ingenting er som det en gang var", in *Fjellet i fare - mangfold og samspill* - DNT's Årbok 1991:11-19, Oslo: Den Norske Turistforening.
- Frogner, Ola K., Epost Hemsedal Postmottak, (2009): VS: *Forespørsmål om Informasjon* [e-mail], Frøydis Brekken Elvik, response to information query.
- GIS (2009): "What is GIS." [online].-URL: <http://www.gis.com/whatisgis/> (retrieved 15 December 2008).
- God Tur (14.2.2009): "Velkommen til God Tur.no" [online].-URL: <http://www.godtur.no/> (retrieved 14 February 2009).
- Google Earth (2009): "Google Earth," [online].-URL: <http://earth.google.com/> (retrieved 12 May 2009).
- Google Press Center (12.6.2006): "Google Announces Major Imagery Update For Google Earth, New Tools And Innovations in Mapping." [online].-URL: <http://www.google.com/press/pressrel/geoday.html> (retrieved 15 March 2009).
- Google Press Center (2008): "Earth" [online].-URL: <http://www.google.com/press/descriptions.html#earth> (retrieved 15 March 2009).
- Gómez-Pompa, A. and Kaus, A. (1992): "Taming the Wilderness Myth" in Callicott, J. Baird and Nelson, Michael P. (ed.) (1998): *The Great New Wilderness Debate*. London: The University of Georgia Press.
- Gpsies (2009): "Gpsies – Tracks for Vagabonds," [online].-URL: http://www.gpsies.com/home.do#9_59.9138204_10.7387413_p (retrieved 14 February 2009).
- Gule Sider (2009): "Gule Sider Kart," [online].-URL: <http://www.gulesider.no/kart> (retrieved 12 April 2009).
- Hagen, Nils U., (1990): "Den første kryssingen av Grønland: Nansen 1888." [online].-URL: www.tidsskriftetgronland.dk/archive/1990-1-Artikel02.pdf (retrieved 12 March 2009).
- Harley, J.B. and Laxton, Paul (ed.) (2001): *The New Nature of Maps*, Baltimore: The Johns Hopkins University Press.
- Harvey, David (2000): *Spaces of Hope*, Edinburgh: Edinburgh University Press.

- Huntford, Roland (2008) *Two Planks and a Passion – The Dramatic History of Skiing*, London: Continuum Books.
- Hvitserk (20.3.2009): “Over den Store Bre.” [online].-URL: http://www.hvitserk.no/turer/Lange_skiturer/1009 (retrieved 20 March 2009).
- Høgfjellsskolen norsk Alpincenter (1977): “Friluftsliv eller Rekreasjon”, *Mestre Fjellet*, 26: 13-15.
- Ahlström, Ingemar (2000): “Utomhus i Konsumtionssamhället” in Sandell, Klas and Sörlin, Sverker (ed.): *Friluftshistoria – Från “Härdande Friluftsliv” till Ekoturism och Miljöpedagogik*. Stockholm: Carlsson Bokförlag.
- Keeling, Paul M. (2008): “Does the Idea of Wilderness Need a Defence?”, *Environmental Values*, Vol. 17:505-519.
- Kristensen, Krister (ed.) (2002): *Snøskred og friluftsliv – Konferanserapport*. Norges Geotekniske Institutt, Den Norske Turistforening, Norges Røde Kors. Oslo: Naper.
- Kvaløy (Setreng), Sigmund (1968): “Kommersiell turisme – informasjonsmengde null?”, *Mestre Fjellet*, 3-4: 29.
- Leopold, Aldo (1925): “Wilderness as a Form of Land Use” in Callicott, J. Baird and Nelson, Michael P. (ed.) (1998): *The Great New Wilderness Debate*. London: The University of Georgia Press.
- Lien, Inge (1976): ”Rettleiing i Friluftsliv – Eit Utgangspunkt”. *Mestre Fjellet* 22-23: 17-24.
- MacIntyre, Alasdair (1981): *After Virtue – A Study in Moral Theory*, London: Duckworth.
- Macnaghten, Phil and Urry, John (1998): *Contested Natures*, London: Sage Publications.
- McHarg, Ian L. (1971): *Design with Nature*, Published for the American Museum of Natural History. Garden City, N.Y: Doubleday/Natural History Press.
- Marshall, Robert (1930): “The Problem of the Wilderness” in Callicott, J. Baird and Nelson, Michael P. (ed.) (1998): *The Great New Wilderness Debate*. London: The University of Georgia Press.
- Monmonier, Mark (1996): *How to Lie with Maps*, Chicago: University of Chicago Press.

- NASA (10.10.2007): "Sputnik and the Dawn of the Space Age." [online].-URL: <http://history.nasa.gov/sputnik/> (retrieved 20 April 2009).
- Norgesglasset (2002): "Norgesglasset," [online].-URL: <http://ngis2.statkart.no/norgesglasset/default.html> (retrieved 12 December 2008).
- NRK (27.3.2006): "Får ikke forske på kiting." [online].-URL: <http://www.nrk.no/nyheter/distrikt/ostafjells/buskerud/1.386072> (retrieved 17 March 09).
- Næss, Arne (1997): "Forord" in *Barske Glæder*, Zappfe, Peter Wessel and Setreng, Sigmund Kvaløy (1997), Oslo: Pax Forlag.
- Odden, Alf and Bischoff, Anette. (2002): "Nye Trender i Norsk Friluftsliv – Utvanning eller forsterkning av gamle mønstre og idealer." Paper presented at Forskning i Friluft, Øyer, 19-20 Nov. 2002.
- Odden, Alf (2008): *Hva Skjer med Norsk Friluftsliv? En studie av utviklingstrekk i norsk friluftsliv 1970-2004*. Doctoral dissertation. NTNU, Fakultet for samfunnsvitenskap og teknologiledelse, Geografisk Institutt.
- Oelschlaeger, Max (1991): *The Idea of Wilderness*, Newhaven: Yale University Press.
- Open GIS Consortium (16.1.2002): "Web Map Service Implementation Specification." [online].-URL: http://portal.opengeospatial.org/files/index.php?artifact_id=1081&version=1&format=pdf (retrieved 15 March 2009).
- Open Geospatial Consortium (24.5.2007): "Glossary of Terms – V." [online].-URL: <http://www.opengeospatial.org/ogc/glossary/v> (retrieved 12 December 2008).
- Owings, Rich (2005): *GPS Mapping – Make Your Own Maps*, Fort Bragg California: Ten Mile Press.
- Pace, Scott et.al (1995): *The Global Positioning System - Assessing National Policies*, monograph report published by the RAND Corporation, Rand Research.
- Pickles, John (1995): *Ground Truth – The Social Implications of Geographical Information Systems*, New York: The Guilford Press.
- Pickles, John (2004): *A History of Spaces*, London: Routledge.
- Postman, Neil (1993): *Technopoly*, New York: Alfred A. Knopf Inc.

- Riese, Hanne and Vorkinn, Marit 2002. "The production of meaning in outdoor recreation: a study of Norwegian practice", *Norsk Geografisk Tidsskrift–Norwegian Journal of Geography* Vol. 56, p.199-206.
- Rolston III, Holmes (2003): "Value of Nature and Nature of Value" in Light, Andrew and Rolston III, Holmes: *Environmental Ethics*. Oxford: Blackwell Publishing
- Rothenberg, David (1993): *Hand's End – Technology and the Limits of Nature*, Berkeley: University of California Press.
- Rothenberg, David (2002): *Always the Mountains*, Athens: The University of Georgia Press.
- Run.GPS Community Server (2009): "Run.GPS Community Server," [online].- URL: <http://www.gps-sport.net/> (retrieved 14 February 2009).
- Rød, Jan K. (2009): *Verktøy for å Beskrive Verden*, Trondheim: Tapir Akademisk Forlag.
- Sande, Erlend (10.3.2009): "Vil ha påbud om guide i Lyngsalpene." [online].- URL: <http://www.friflyt.no/index.php?pagenr=12&articlenr=56630> (retrieved 10 March 2009).
- Schneider, Ute (2007): *Kartenes Makt*, Oslo: Spartacus.
- Scott, James (1998): *Seeing Like a State*, New Haven: Yale University Press.
- Ski Net UK (27.4.2009): "Revolutionary new GPS Tracking System." [online].- URL: <http://www.skinetuk.com/skilog/skilog.htm> (retrieved 27 April 2008).
- Ski og Sykkel (2009): "Ski og Sykkel," [online].-URL: <http://www.skiogsykkel.no/gpsspor/gpssporski> (retrieved 14 February 2009).
- Skogen, Ketil (1999): *Cultures and Natures - cultural patterns, environmental orientations and outdoor recreation practices among Norwegian youth*. Dr. polit. Dissertation. University of Oslo: Department of Sociology and Human Geography.
- SlopeTracker (27.4.2009): "SlopeTracker Map." [online].-URL: <http://slopetracker.no/stmap.aspx> (retrieved 27 April 2009).
- Solheim, Erik (1991): "Vegen Stengjer mot Fjellet", in *Fjellet i fare - mangfold og samspill* - DNT's Årbok 1991:86-89, Oslo: Den Norske Turistforening.

- Space-Based Positioning, Navigation and Timing (2009): “Selective Availability.” [online].-URL: <http://pnt.gov/public/sa/> (retrieved 15 March 2009).
- Space-Based Positioning, Navigation and Timing (18.9.2007): “Statement by the Press Secretary.” [online].-URL: <http://pnt.gov/public/docs/2007/sa.shtml> (retrieved 14 April 09).
- Storli, Liv Turid (2009): “Tøffe Gutter Går Ikke På Bærtur”, interview with Odden, Alf, in *Friluftsliv* nr 1, Vinterspesial 2009, p.12-16.
- Telseth, Frode (2005): *Dra På*. Master thesis. Høgskolen i Telemark, Institutt for idrett og friluftsliv.
- Turnbull, David (1989): *Maps are Territories – Science is an Atlas*, Chicago: University of Chicago Press.
- Turnbull, David (2000): *Masons, Tricksters and Cartographers*, Amsterdam: Harwood Academic Publishers.
- Turner, Jack. (1991): “In Wilderness is the Preservation of the World” in Callicott, J. Baird and Nelson, Michael P. (ed.) (1998): *The Great New Wilderness Debate*. London: The University of Georgia Press.
- Venture Snowboards (12.1.2009): “Sex.” [online].-URL: http://www.venturesnowboards.com/index_07.php?inc=sex.html (retrieved 12 January 2009).
- Vorkinn, Marit et.al (2000): *Norsk friluftsliv - på randen av modernisering?*, Lillehammer: Østlandsforskning.
- Walford, Alan. (2007): “What is Photogrammetry?” [online].-URL: <http://www.photogrammetry.com/> (retrieved 12 November 2008).
- Wood, Denis (1992): *The Power of Maps*, New York: The Guilford Press.

Documentary Film:

- Obenhaus, Mark (2007): *Steep*, The Documentary Group, High Ground Productions.

Interviews:

My interview-subjects have both been given the option to read this thesis prior to its submission. Eriksen has chosen to accept this offer and has agreed to my presentation of him and his views. Fadnes declined the opportunity.

Fadnes, Espen: Merited freerider and experienced geographer employed as advisor to the Norwegian Defence. Oslo: 18.12.2008

Eriksen, Lars: Freerider, long time employee at Hemsedal ski-resort and previous informant in a study of snowboard culture in Hemsedal. Hemsedal: 9.2.2009

Seminars:

Plandataforum, organised by Norway Digital (Norge Digitalt) and the Norwegian Mapping Authority (Statens Kartverk) in Oslo 26.9.2008

Temadataforum, organised by Norway Digital (Norge Digitalt) and the Norwegian Mapping Authority (Statens Kartverk) in Oslo 06.10.2008

The 20th Nordic GIS Conference, organised by Geoforum at Radisson SAS Hotel, Fredrikstad 15-17.10.2009.

Moderne Datafangstmetoder, organised by Geoforum at Gardermoen 10.11.2008